

Foresthill Divide Community Plan Draft Environmental Impact Report SCH#2001092094



Prepared for:
Placer County Planning
Department
Foresthill Divide Community
Plan Team

Prepared by:
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Foresthill Divide
Community Plan
Draft Environmental Impact Report
SCH #2001092094

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EXECUTIVE SUMMARY

PROJECT DESCRIPTION

The proposed project consists of the adoption and implementation of the Foresthill Divide Community Plan (FDCP), which consists of the following elements:

- Community Development Element, including Population and Housing, Land Use, Community Design, Public Facilities, and Parks and Recreation
- Resource Management Element, including Natural Resources/Conservation/Open Space, Cultural Resources, and Air Quality
- Transportation and Circulation Element

The FDCP includes a land use and circulation plan for the Plan area. The proposed project also includes rezoning of properties within the Plan area as necessary and required to achieve consistency with the proposed FDCP land use designations.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Section 15123(b)(1) of the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines) provides that the summary shall identify each significant effect with proposed mitigation measures that would reduce or avoid that effect. This information is summarized in Table S-1, Summary of Impacts and Mitigation Measures. The impacts of the FDCP are analyzed in comparison to existing conditions in the Plan area.

ALTERNATIVES TO THE PROJECT

Section 15126.6 of the State CEQA Guidelines requires the EIR to describe a reasonable range of alternatives to the project or to the location of the project that could feasibly accomplish the basic objectives of the project, and to evaluate the comparative merits of the alternatives. The impacts of the proposed project that have been identified as significant after mitigation include provision of adequate fire protection services and facilities to serve the Plan area; new stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP; emissions of dust and contaminants from construction activities associated with development of the proposed FDCP; and increased traffic throughout the Community Plan area due to development in accordance with the FDCP. Accordingly, alternatives that would reduce or avoid these impacts represent an environmentally superior alternative to the project. However, if the environmentally superior alternative is the “no project” alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

The EIR evaluates the following alternatives:

- No project/development of the Plan area in accordance with the existing General Plan

- Highest Density Alternative
- Lowest Density Alternative
- Reduced Density Alternative

The Reduced Density Alternative has been identified as the environmentally superior alternative; however, it would not achieve the project objectives (general community goals and vision statement formulated by the Foresthill Divide Community Plan Team.) The No Project Alternative and the Highest Density Alternative would have greater impacts than the proposed FDCP, and the Lowest Density Alternative would have greater impacts than the Reduced Density Alternative. A detailed evaluation of these alternatives is included in Chapter Four. The alternatives and associated impacts are summarized as follows:

- **No Project/Development Consistent with the General Plan Alternative** consists of an analysis of the continuation of the existing plan, in which case the Plan area will be developed in accordance with the existing Foresthill General Plan without adoption of the FDCP. Under this alternative, the projected impacts of the proposed FDCP are compared to the impacts that would occur under the existing Foresthill General Plan. The 1981 Foresthill General Plan encompassed approximately 56 square miles, compared to 109 square miles within the FDCP area. It has an estimated buildout population of 28,000±, compared to an estimated 13,500 for the FDCP. The additional area encompassed by the FDCP would develop in accordance with the Placer County General Plan or the Weimar/Clipper Gap/Applegate General Plan, depending upon the location. As described in Chapter Four, many of the original assumptions of the 1981 Foresthill General Plan are outdated or have proven to be faulty. Development in accordance with the existing Plan could result in potentially significant and greater impacts, in comparison to the proposed FDCP, related to population and housing, land use, community design, public facilities, parks and recreation, natural resources/conservation/open space, cultural resources, air quality, transportation and circulation, and noise.
- **Highest Density Alternative** would accommodate a buildout population of 28,355 residents, compared to the FDCP buildout estimate of 13,500. In comparison to the proposed FDCP, densities in residential areas would be higher: residential densities in many areas are doubled, and many areas shown in the proposed FDCP for Ag/Timberland uses are shown for residential uses (primarily at densities ranging from 2/3 dwelling units per acre to 4.6 dwelling units per acre) in the Highest Density Alternative. Development in accordance with the Highest Density Alternative could result in potentially significant and greater impacts, in comparison to the proposed FDCP, related to population and housing, land use, community design, public facilities, natural resources/conservation/open space, cultural resources, air quality, transportation and circulation, and noise. Impacts on parks and recreation would be mitigated by park fees and assessments and private recreational facilities required of new developments.

- **Lowest Density Alternative** would accommodate a buildout population of 12,727 residents, slightly lower than the FDCP buildout estimate of 13,500. In comparison to the proposed FDCP, densities in residential areas would be reduced in the Todd's Valley area, the Pomfret Estate ("Forest Ranch") property, and some properties along Foresthill Road between Todd's Valley and the Pomfret Estate property. Development in accordance with the Lowest Density Alternative could result in potentially significant impacts, similar to the proposed FDCP, related to fire protection, air quality, and transportation and circulation. Impacts on population and housing, land use, community design, other public facilities, parks and recreation, natural resources/conservation/open space, and noise would be slightly reduced.
- **Reduced Density Alternative** would accommodate a buildout population of 9,250 residents, approximately the midpoint between the FDCP buildout estimate of 13,500 and the existing number of residents and housing units in the Plan area. In comparison to the proposed FDCP, residential densities would be reduced throughout the Plan area, with the exception of areas that are already subdivided. Other planned land uses would be similarly reduced in area because the lower population would not support the amount of commercial, industrial and mixed-use development accommodated by the FDCP. Development in accordance with the Reduced Density Alternative would result in reduced impacts, in comparison with the proposed FDCP, related to fire protection, other public facilities and services, air quality, transportation and circulation, population and housing, land use, community design, parks and recreation, natural resources/conservation/open space, and noise.

AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines provides that the Summary shall identify areas of controversy known to the lead agency, including issues raised by agencies and the public, and issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects. Areas of controversy and issues to be resolved for the proposed FDCP and rezoning of which the lead agency is aware include the following:

- Reduction in residential densities on individual properties and establishment of Mixed-Use Districts
- Increased traffic and air quality impacts associated with new development
- Establishment of Foresthill Community Design Guidelines
- Effects of new development on public facilities and services on the Foresthill Divide
- Loss of open space
- Increased urban/suburban development on the Foresthill Divide

CHAPTER I

INTRODUCTION

I.1 PROPOSED ACTION

The project consists of the adoption and implementation of the Foresthill Divide Community Plan (FDCP), which consists of the following elements:

- Community Development Element, including Population and Housing, Land Use, Community Design, Public Facilities, and Parks and Recreation
- Resource Management Element, including Natural Resources/Conservation/Open Space, Cultural Resources, and Air Quality
- Transportation and Circulation Element

The FDCP includes a land use and circulation plan for the Plan area. The proposed project also includes rezoning of properties within the Plan area as necessary and required to achieve consistency with the proposed FDCP land use designations.

I.2 PROCEDURES

Pursuant to Section 15168 of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines), a Program Environmental Impact Report (EIR) is prepared for a series of related actions that can be characterized as one large project, such as a general plan or specific plan. In contrast, a project EIR, the most common type of EIR, examines the impacts that would result from a specific development proposal or other project.

Through the preparation of an Initial Study, Placer County determined that a Program EIR should be prepared for the FDCP pursuant to CEQA Guidelines Section 15063. A Notice of Preparation (NOP) was circulated from September 25 through October 26, 2001, for review and comment by responsible, trustee, local and other interested agencies. The NOP and responses to the NOP are included as Appendix A of this EIR.

As defined by Section 15378 of the CEQA Guidelines, a project is any action that "...has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..." Section 15093 of the Guidelines requires decision-makers to balance the benefits of a proposed project against any unavoidable environmental effects of the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, the decision-makers may adopt a statement of overriding considerations, finding that the environmental effects are acceptable in light of the project's benefits to the public.

Under CEQA, the Lead Agency is usually the public agency with authority to approve or deny the project. In this case, the Placer County Board of Supervisors will act as Lead Agency with

authority to certify the EIR. Under Section 15381 of the CEQA Guidelines, a Responsible Agency is a public agency other than the Lead Agency that has discretionary approval authority over the project, and will utilize the EIR prepared for the County. No additional public agencies whose discretionary approval is required have been identified. The lead agency is a County government, which has the discretionary authority to amend its land use documents and regulations. Portions of the Plan area are within the jurisdiction of the federal government (U.S. Forest Service, U.S. Bureau of Land Management, and the U.S. Bureau of Reclamation); these lands are not subject to the provisions of the FDCP.

The CEQA process requires that the lead agency seriously consider input from trustee agencies, other interested agencies, citizen groups and individuals. CEQA provides for a public process requiring full public disclosure of the expected environmental consequences of the proposed action. The public must be given a meaningful opportunity to comment. CEQA also requires monitoring to ensure that mitigation measures are carried out.

CEQA requires a 45-day public review period for commenting on the Draft EIR. During the review period, any agency, group or individual may comment in writing on the Draft EIR, and the Lead Agency must respond in writing to each comment on environmental issues in the Final EIR. According to Section 15202 of the CEQA Guidelines, CEQA does not require formal hearings at any stage of the environmental review process. However, it is typical to consider the EIR and its findings during public hearings required for the associated project.

I.3 METHODOLOGY

As described in Section 1.2 above, Placer County has determined that a Program EIR should be prepared for the project.

Section 15168 of the State CEQA Guidelines provides the following description of when a program EIR is used:

- (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
 - (1) Geographically,
 - (2) As logical parts in the chain of contemplated actions,
 - (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
 - (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Section 15168(c) and (d) also describe the use of a program EIR with later activities.

(c) Use With Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

(d) Use With Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program...

Refer to Sections 15168(c) and (d) for greater detail on the process of using a program EIR for later activities.

Section 15183 of the CEQA Guidelines includes the following discussion regarding projects consistent with a community plan, General Plan or zoning:

(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

- (1) are peculiar to the project or the parcel on which the project would be located,
- (2) were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,
- (3) are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or

(4) are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

(c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as

contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.

(d) This section shall apply only to projects which meet the following conditions:

(1) The project is consistent with:

(A) a community plan adopted as part of a general plan,

(B) a zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or

(C) a general plan of a local agency, and

(2) an EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

(e) This section shall limit the analysis of only those significant environmental effects for which:

(1) each public agency with authority to mitigate any of the significant effects on the environment identified in the EIR on the planning or rezoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and

(2) the lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.

(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR. Such development policies or standards need not apply throughout the entire city or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a city or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decisionmaking body of the city or

county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the city or county decides to apply the standards or policies as permitted in this section.

(g) Examples of uniformly applied development policies or standards include, but are not limited to:

- (1) Parking ordinances,
- (2) Public access requirements,
- (3) Grading ordinances,
- (4) Hillside development ordinances,
- (5) Flood plain ordinances,
- (6) Habitat protection or conservation ordinances,
- (7) View protection ordinances.

(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.

(i) Where the prior EIR relied upon by the lead agency was prepared for a general plan or community plan that meets the requirements of this section, any rezoning action consistent with the general plan or community plan shall be treated as a project subject to this section.

(1) “Community plan” is defined as a part of the general plan of a city or county which applies to a defined geographic portion of the total area included in the general plan, includes or references each of the mandatory elements specified in Section 65302 of the Government Code, and contains specific development policies and implementation measures which will apply those policies to each involved parcel.

(2) For purposes of this section, “consistent” means that the density of the proposed project is the same or less than the standard expressed for the involved parcel in the general plan, community plan or zoning action for which an EIR has been certified, and that the project complies with the density-related standards contained in that plan or zoning. Where the zoning ordinance refers to the general plan or community plan for its density standard, the project shall be consistent with the applicable plan.

(j) This section does not affect any requirement to analyze potentially significant offsite or cumulative impacts if those impacts were not adequately discussed in the prior EIR. If a significant offsite or cumulative impact was adequately

discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that offsite or cumulative impact.

Analysis contained in the Initial Study prepared for this project (reference Appendix A) and responses to the Notice of Preparation have identified the following areas, organized to correspond to the subjects addressed in the Foresthill Divide Community Plan, which may result in potentially significant impacts requiring in-depth review and which are analyzed in this EIR. All impacts are analyzed in comparison to existing conditions in the Plan area.

Population and Housing. This section addresses the growth inducing potential of the FDCP and impacts on the housing stock. Although these impacts were found to be less than significant in the Initial Study, CEQA requires that an EIR address the growth-inducing impacts of a project.

Land Use. This section focuses on impacts on agricultural and timber resources or operations, impacts related to land use conflicts, and impacts related to changes in land use designations and zoning districts from the 1981 Foresthill General Plan.

Community Design. This section addresses visual and aesthetic impacts related to FDCP adoption, including impacts on scenic vistas, scenic highways, and light and glare.

Public Facilities. Subjects addressed in this section include impacts on police and fire protection, education/schools, water supply, sewage disposal, drainage and water quality, public utilities, and impacts on other public services (solid waste, general government, cemeteries, libraries, and postal facilities), along with recommended mitigation measures.

Parks and Recreation. This section addresses impacts on existing park and recreation facilities and programs, as well as the demand for new facilities and programs which may be created by the FDCP.

Natural Resources/Conservation/Open Space. This section evaluates the available data to determine whether the project has any potential to disturb species of special concern or adversely affect habitat, and recommends measures that are necessary to mitigate potential impacts. This section also identifies impacts and mitigation measures related to agricultural and forest resources, soils, geologic hazards, water resources, open space and conservation.

Cultural Resources. Existing cultural resources (archaeological and historical) in the Plan area are described in this section, and impacts and mitigation measures are identified.

Air Quality. The air quality section addresses the direct and cumulative air quality impacts of the FDCP and rezoning, which is within the Placer County Air Pollution Control District (PCAPCD). This section addresses the overall magnitude of emissions resulting from the implementation of the Community Plan, as well as measures that could be implemented to reduce project emissions.

Transportation and Circulation. The transportation and circulation section evaluates and summarizes existing and cumulative conditions in the Plan area, including an analysis of roadway capacities and future cumulative traffic conditions. Circulation improvements are identified which will reduce potential impacts.

Noise. The noise section evaluates impacts on noise-sensitive uses of noise-generating activities, including new stationary noise sources and traffic noise associated with major roadways in the Plan area.

I.4 ORGANIZATION OF THE EIR

Sections 15122 through 15132 of the CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.

This Draft EIR is organized in the following manner:

Executive Summary

The Executive Summary defines the general characteristics of the proposed FDCP and provides a concise summary matrix of the Community Plan's environmental impacts and associated mitigation measures. The Executive Summary also summarizes the alternatives to the FDCP.

Chapter 1. Introduction

Chapter 1 provides an introduction and overview of the EIR and describes the characteristics and uses of a program EIR.

Chapter 2. Project Description

This chapter provides a detailed description of the proposed FDCP, including intended objectives, background information, and physical and technical characteristics of the proposed Community Plan. This chapter also presents applicable goals and policies of the Placer County General Plan. The proposed rezoning of the Plan area is also described, including new zoning districts.

Chapter 3. Environmental Setting, Impacts and Mitigation Measures

Chapter 3 analyzes the environmental topics listed below and described previously in Section 1.3. Each subsection contains a description of the existing setting of the Plan area, identifies Plan- and zoning-related impacts in comparison to existing conditions and feasible mitigation measures, and summarizes findings and conclusions.

- Population and Housing
- Land Use
- Community Design
- Public Facilities
- Parks and Recreation
- Natural Resources/Conservation/Open Space
- Cultural Resources
- Air Quality
- Transportation and Circulation
- Noise

The following format is used in this Draft EIR for impact evaluation and development of mitigation measures for identified impacts.

1) INTRODUCTION

2) SETTING

3) IMPACT EVALUATION CRITERIA

The standard or threshold by which impacts are measured is identified, with the objective of determining if an impact will be significant. Where no locally adopted or other specific standards exist, the thresholds established in Appendix G (Environmental Checklist) of the State CEQA Guidelines are used.

4) IMPACTS AND MITIGATION MEASURES

Impact #: Each impact is described and listed by number for future reference. A conclusion is made regarding the significance of the impact, both before and after mitigation.

Mitigation Measure #: Each mitigation measure is described and listed by number for future reference, and includes a reference (by number) to which impact or impacts it applies. This section also includes a statement whether or not the recommended measure will reduce the impact below the level of significance, based on the impact evaluation criteria.

Chapter 4. Project Alternatives

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen the environmental effects of the project. This alternatives analysis provides a comparative analysis between the FDCP and selected alternatives:

- No Project/development of the site in accordance with the existing Foresthill General Plan
- Lowest Density Alternative

- Highest Density Alternative

Chapter 5. Mandatory CEQA Sections

This chapter contains required discussions and analyses of various issues mandated by CEQA. The following topics are addressed in this section:

- Significant Environmental Effects That Cannot Be Avoided
- Significant Irreversible Impacts
- Cumulative Impacts
- Growth Inducing Impacts

In accordance with Section 15128 of the CEQA Guidelines, the Draft EIR contains a brief statement indicating the reasons why certain subjects have been found to pose no significant project-related impacts and are therefore not discussed in detail in this EIR.

List of Persons Contacted

This section presents a list of persons that were consulted during the preparation of the Draft EIR.

References

This section presents a list of references that were used during the preparation of the Draft EIR.

Report Contributors

This section presents a list of all authors and other persons who contributed to the preparation of the Draft EIR.

Appendices

Appendices are attached to this Draft EIR, including the Notice of Preparation and responses to the NOP, and technical studies prepared for this EIR.

I.5 ENVIRONMENTAL REVIEW PROCESS

Notice of Preparation

In accordance with Section 15082 of the State CEQA Guidelines, Placer County prepared a Notice of Preparation (NOP) for this EIR on September 25, 2001. The County is identified as the lead agency for the proposed FDCP and rezoning. The NOP was circulated to local, state and federal agencies and other interested parties to solicit comments on the proposed FDCP and rezoning. Comments and concerns raised in response to the NOP were considered during preparation of this Draft EIR and can be found in Appendix A.

Draft EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the FDCP and rezoning, description of the environmental setting, identification of FDCP and rezoning impacts, and mitigation measures for impacts found to be significant, as well as an analysis of FDCP alternatives. Upon completion of the Draft EIR, the County will file a Notice of Completion (NOC) with the State Clearinghouse to begin the public review period (Public Resources Code, Section 21161).

Public Notice/Public Review

Concurrent with the NOC, the County will provide public notice of the availability of the Draft EIR for public review, and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period will be 45 days. Although no public hearings on the Draft EIR are required by CEQA, the County expects to hold one public hearing during the review period. Public comment on the Draft EIR will be accepted in both written and oral form at a public hearing conducted by the Placer County Planning Commission.

All comments or questions regarding this Draft EIR should be addressed to:

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Response to Comments/Final EIR

Following the public review period, the Final EIR will be prepared. The Final EIR will respond to all public comments, both written and oral, received during the review period and at any public hearing. The County Planning Commission will review the Draft EIR and provide comments on the Draft EIR for the Board of Supervisors to consider. The County Board of Supervisors will review and consider the Final EIR prior to their decision to take specific actions related to the FDCP.

Certification of the EIR

If the County finds that the Final EIR is "adequate and complete", the County may certify the Final EIR in writing in accordance with CEQA Guidelines Section 15091, and if applicable, Section 15093. Section 15091 specifies that the lead agency shall state findings, in writing, of any environmental impacts and the changes made to lessen the impact or the reason why such mitigation is infeasible. Section 15093 requires a statement of overriding considerations in cases

where the lead agency deems the project's benefits outweigh unavoidable environmental risks. The rule of adequacy generally holds that the EIR can be certified if:

- 1) the EIR shows a good faith effort at full disclosure of environmental information; and
- 2) the EIR provides sufficient analysis to allow decisions to be made regarding the project in contemplation of environmental considerations.

Mitigation Monitoring

CEQA Section 21081.6(a) and CEQA Guidelines Section 15097 require lead agencies to adopt a mitigation monitoring and reporting program to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. Any mitigation measures adopted by the County as conditions for approval of the Community Plan will be included in a Mitigation Monitoring and Reporting Program to verify compliance. This Program is adopted by resolution at the time of Community Plan approval.

CHAPTER 2

PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Foresthill Divide Community Plan area is located within the County of Placer, California, as shown in Figures 2-1 and 2-2. The Plan area comprises approximately 109 square miles located in the foothills of the western slope of the Sierra Nevada Mountains, as shown in Figure 2-3. The Plan area is generally bounded by:

- North Fork of the American River, Shirttail Canyon, the watershed of Sugar Pine Reservoir, and Elliott Ranch Road on the west and north.
- West branch of El Dorado Canyon on the east.
- North Fork of the Middle Fork American River and the Middle Fork American River on the south.

The Foresthill Divide is a large ridge located within the American River Watershed that supports numerous small, rural communities. These communities include establishments that are remnants of the Gold Rush era, and are of unique historical and cultural value. As the communities have continued to grow, new developments have been introduced. While the Plan area remains predominantly rural in character, along with other unincorporated areas of the county, the Foresthill Divide has absorbed some of the growth in Placer County. This has resulted in the subdivision of land and the introduction of modern patterns of development characterized by large-lot residential development, development that occurs away from the core of the community, and automobile-oriented development. Development of the Plan area has also resulted in opportunities for re-use of existing structures and sites.

2.2 PROJECT BACKGROUND AND OBJECTIVES

The Foresthill Divide Community Plan is a joint effort by staff of the Placer County Planning Department and the Foresthill Divide Community Plan Team (FDCP Team), a working group of seven local residents appointed by the Placer County Board of Supervisors who spent literally hundreds of hours developing Plan Assumptions, a Vision Statement, General Goals, Goals and Policies, and the Land Use Map. The FDCP Team conducted a detailed survey of the residents and property owners on the Divide (Foresthill Community Survey, included as Appendix A to the FDCP), and held a series of Town Hall meetings to give residents of the Divide the opportunity to express their views. All meetings of the FDCP Team were open to the public, and public comment was invited. Subcommittees of the FDCP Team met and prepared reports on such topics as community design, public facilities, economic development, natural resources, public safety, recreation, schools, and traffic and circulation. Four newsletters were published and distributed summarizing progress on the Community Plan. Community Plan adoption will follow public hearings before both the Placer County Planning Commission and Board of Supervisors.

The following General Community Goals were developed based on the results of the Community Survey and comments provided by residents and property owners who attended Town Hall meetings. Along with the Vision Statement, they provide the overall structure or framework for the individual elements of the Foresthill Divide Community Plan. More specific goals and policies for each element are included in the FDCP.

- To develop an interconnected trail system for hiking, biking and equestrian uses extending from the confluence of the North and Middle Forks of the American River easterly to Sugar Pine Reservoir.
- To preserve the community's outstanding visual and aesthetic features, including significant vistas, woodlands, stream and riparian zones, ponds and lakes, and important wildlife habitat areas.
- To protect the community against wildland fires, erosion, water quality degradation and localized flooding.
- To conserve and protect as valuable community assets the natural, cultural and historic resources of the Plan area.
- To encourage mixed-use development within the principal commercial district (i.e., from the Foresthill Divide Middle School easterly along Foresthill Road to the Foresthill Elementary School) and within the historic downtown area.
- To manage the land within the Plan boundaries as a limited and protected resource so that its future uses will be beneficial to the entire community.
- To insure that future development on the Divide will reflect and maintain the forested residential character of the community.
- To provide public facilities in a location that is central to the concentrations of population on the Divide to encourage the interaction of residents and a strong sense of community.
- To provide residential development which is reasonably integrated into the community rather than being physically isolated.
- To ensure that public services and facilities are available to serve the needs created by both existing and future residents and visitors to the Divide.
- To respect and protect existing agricultural uses and timberlands from residential encroachment.
- To encourage and maintain access to public lands, and to protect the boundaries of public lands from residential encroachment.

- To establish as a high priority for the community and the County the development of new employment opportunities and appropriate economic development.
- To recognize that amendments to the Foresthill Divide Community Plan should be minimal until and unless circumstances in the area have changed so significantly that an update of the Plan is necessary; piecemeal amendments to the Plan should be discouraged.

2.3 DESCRIPTION OF THE PROJECT

The project initiated by the County of Placer is referred to as the proposed “Foresthill Divide Community Plan” and is intended to supersede the 1981 Foresthill General Plan. The FDCP provides an opportunity to comprehensively address issues facing the community and to responsibly and proactively plan for the next 20 years. The FDCP has been developed as a joint effort of the FDCP Team and County Planning Department staff. Excerpts from the Vision Statement developed for the community planning process describe some of the unique attributes of Foresthill and help to clarify the overall purpose and direction of planning efforts, as follows:

The community of Foresthill is located in a special position; between the outer edges of the rapidly-growing population centers in the Sacramento Valley and public forests and park lands. The community rests atop a broad, relatively flat ridge between the two deep river canyons of the North Fork American River and the Middle Fork American River. Foresthill also serves as a primary entry point into the western central Sierra Nevada mountains...Creating more local employment opportunities without substantially degrading the scenic, forested environment of the Divide will be an on-going challenge for the residents of the Plan area...The Foresthill Divide will likely not have a future population large enough to support major new commercial enterprises. Small retail stores, personal services businesses, professional offices, restaurants and similar uses can be expected to be developed within the downtown area which will continue to provide for the daily needs of the residents and visitors while expanding upon the original small town character of the historic area. The historic downtown district will remain as a cherished focal point of the Plan area and will be a source of pride for the community. The traditionally industrial areas near the historical Foresthill townsite will be redeveloped to provide new employment opportunities for residents of the Divide. Expanded tourist and outdoor recreation-oriented businesses will continue to develop as a consequence of the community’s unique location and proximity to public lands. The increased emphasis on outdoor recreation on the public lands surrounding the Foresthill community and the increasing population growth west of the Divide will have substantial effects on the residents of the Plan area. Future growth on the Foresthill Divide should reflect an awareness of and consistency with this vision.

The current Foresthill General Plan would allow for more than 28,000 residents on the Divide if every available parcel of land were to be subdivided to the maximum number of lots allowed. The FDCP concludes that recently-completed improvements to Foresthill Road can serve a total population of less than 12,000 without undesirable traffic congestion. The Land Use Map

(Figure 2-4) proposes a reduction in the maximum buildout population density from 28,000± to 13,500±. The FDCP, Land Use Map and proposed zoning are based on the Vision Statement and General Goals presented above, the results of the Foresthill Community Survey, consideration of specific requests from a number of property owners, and comments furnished by residents and property owners who attended Town Hall meetings sponsored by the FDCP Team and Placer County.

The Foresthill Divide Community Plan, in combination with the Placer County General Plan, is the official statement of Placer County setting forth goals, policies, assumptions, guidelines, standards and implementation measures that will guide the physical, social and economic development of the Foresthill Divide Community Plan area to approximately the year 2022. The Plan will provide overall direction for future growth in the Foresthill Divide. The Community Plan, in combination with the Placer County General Plan, satisfies the requirements of California Planning and Zoning Law. The FDCP is organized into the following elements and sections:

- Community Development Element, including Population and Housing, Land Use, Community Design, Public Facilities and Parks and Recreation
- Resource Management Element, including Natural Resources/Conservation, Open Space, Cultural Resources, and Air Quality
- Transportation and Circulation Element

The goals, policies and implementation measures for each section are described in detail in the corresponding section of Chapter Three of this EIR, Environmental Setting, Impacts and Mitigation Measures.

The final chapter of the FDCP, entitled Implementation, summarizes the implementation measures presented throughout the FDCP, and describes how the FDCP will be implemented through zoning and other methods.

The FDCP also includes a land use and circulation plan for the Plan area. It assigns the following land use designations, as shown on Figure 2-4:

Low Density Residential (1 Dwelling Unit/1 Acre)
Medium Density Residential (4 DU/1 Ac.)
Medium Density Residential (6 DU/1 Ac.)
Medium Density Residential (8 DU/1 Ac.)
Rural Residential (1 DU/2.3 Ac.)
Rural Residential (1 DU/4.6 Ac.)
Rural Residential (1 DU/10 Ac.)
Ag/Timberland (1 DU/20 Ac.)
Ag/Timberland (1 DU/40 Ac.)
Ag/Timberland (1 DU/80 Ac.)
Ag/Timberland (1 DU/160 Ac.)
Forestry (160 Ac. Min.)
Canyon Mixed Use

Historic Downtown Mixed Use
Mill Site Mixed Use
Commercial
Development Reserve
Industrial
Public

An important new feature of the FDCP is the creation of several mixed-use districts which will allow for many different activities to occur. The purpose of the Historic Downtown Mixed-Use Area is to provide a resident population in the downtown area. Retail commercial uses, offices, public service buildings, and other traditional downtown businesses would be mixed with single-family and multiple-family residential uses (perhaps even within the same building). Another location on the Divide that receives special consideration in the FDCP is the Old Mill Mixed-Use Area at the west end of the Historic Downtown Mixed-Use Area. The Public area on the west end of the old mill site will be utilized for the new high school, a new elementary school and a forest education facility. The Mill Site Mixed-Use Area immediately adjacent to the school site will house job-generating businesses. This site requires careful planning to accommodate these existing and proposed new uses. The Canyon Mixed-Use Area extends from the Foresthill Road/Mosquito Ridge Road “Y” west to the medical building on the south side of Foresthill Road from the church west to the Starlite Café on the north side of Foresthill Road. This district will provide for retail commercial, tourist commercial, single and multiple family residential, and other uses. These mixed-use districts are one way to accomplish one of the primary goals of the FDCP: residential densities should be located near the core of the community. The FDCP also concentrates additional residential densities east of the Historic Downtown district to provide local traffic circulation throughout the downtown or “Core” area.

The Circulation Diagram is shown in Figure 2-5.

The proposed project also includes rezoning of properties within the Plan area as necessary and required to achieve consistency with the proposed FDCP land use designations. Proposed zoning is shown in Figure 2-6. Consistent with the land use designations of the FDCP, the Plan area is subject to the following zoning designations of the Placer County Zoning Ordinance:

Primary Zone Districts:

AE	=	Agricultural Exclusive
C1	=	Neighborhood Commercial
C2	=	General Commercial
F	=	Farm
FOR	=	Forestry
IN	=	Industrial
INP	=	Industrial Park
O	=	Open Space
OP	=	Office and Professional
RF	=	Residential-Forest
RS	=	Residential Single-Family

RM = Residential Multi-Family
TPZ = Timberland Production Zone

Mixed Use Districts:

Mill Mixed-Use (IN-Dc)
Historic Downtown Mixed-Use (C1-Dh/RS-Dh)
Canyon Mixed-Use (C2-Dc/RS-Dc)

Combining Zone Districts:

-Dh = Design Historic
-Dc = Design Scenic Corridor
-UP = Conditional Use Permit Required
-B = Building Site (minimum lot size)
-B-X = As shown on map
-AG = Agriculture
-MR = Mineral Reserve
-SP = Special Purpose
-DL = Density Limitation
-DR = Development Reserve

Consistent with California Planning and Zoning law, zoning districts are proposed to be adopted concurrently with the FDCP to assure consistency with adopted land use designations.

2.4 SURROUNDING LAND USES AND SETTING

The majority of the Plan area is forested and/or part of the steep topography that slopes to the Middle and North Forks of the American River. Development is primarily concentrated in areas where it can be sustained, including Foresthill, the Todd's Valley subdivision, Baker Ranch, Michigan Bluff, and Yankee Jim's areas. The large northeast portion of the Plan area consists of U.S. Forest Service Timberlands. Forestry uses with 20 to 160 acre minimum lot size requirements are located west of these Timberlands, and surround the Foresthill townsite. The westernmost portion of the Plan area consists of low density residential and rural residential uses, as well as public land owned by the U.S. Bureau of Land Management (BLM), and lands within the Auburn State Recreation Area operated by the California Department of Parks and Recreation under contract with the U.S. Bureau of Reclamation.

2.5 RELATIONSHIP TO PLACER COUNTY GENERAL PLAN

On August 16, 1994, the Placer County Board of Supervisors adopted the Placer County General Plan (PCGP) which establishes an overall framework for development of the unincorporated area of the county and protection of its natural and cultural resources. The goals and policies contained in the PCGP are applicable throughout the county, except to the extent that County authority is preempted by cities within their corporate limits.

The FDCP is one of 22 Community Plans adopted for the unincorporated area of Placer County. As stated in the Placer County General Plan, “[b]ecause of the diverse geography and land uses within the county...individual community plans have been prepared within the framework of the overall county plan to address the unique issues and concerns arising in the different unincorporated areas.” The Plan area is approximately twice the size of the area encompassed by the 1981 Foresthill General Plan, and includes area previously subject to the 1994 Placer County General Plan and the 1981 Weimar/Clipper Gap/Applegate General Plan.

The FDCP provides a more detailed focus on a specific geographic area of the unincorporated county. Some of the goals, policies, and implementation measures contained in the FDCP repeat those goals, policies, and implementation measures contained in the PCGP which pertain to the FDCP area. Other goals, policies, and implementation measures in the FDCP go further to supplement and elaborate upon (but not supersede) those contained in the PCGP to address specific community concerns and issues. In some instances, the FDCP relies entirely on the PCGP to address certain issues which are not unique to the FDCP area and which are more appropriately addressed in a broader sense in the PCGP. In particular, noise relies entirely on the PCGP, while the seismic safety and air quality sections of the FDCP rely on the PCGP for the broader issues, and also contain policies to address issues specific to the Foresthill Divide.

2.6 USES OF THE EIR

The following agencies may use this Program EIR in their decision making on permits and other approvals for development projects and other proposed actions that may follow adoption of the FDCP and rezoning:

Placer County Air Pollution Control District: Authority to Construct air quality permits

State of California Department of Health Services, Office of Drinking Water: Permits for community water systems

Placer County Environmental Health Services: Permits for individual onsite wells and septic systems

Foresthill Public Utility District: Provision of community water service

Central Valley Regional Water Quality Control Board: Construction Activities Storm Water General Permits, NPDES Permits, Waste Discharge Requirements, Clean Water Act Section 401 permitting

California Department of Fish and Game: Approval of biological mitigation measures, California Endangered Species Act consultation, Streambed Alteration Agreements

Placer County Transportation Planning Agency, Placer County Department of Public Works, Caltrans, U.S. Forest Service: Roadway improvements, encroachment permits

Placer County: Community Plan approval and subsequent rezoning; tentative maps, parcel maps, conditional use permits

Placer County Local Agency Formation Commission: Formation of and/or annexations to special districts, assessment districts, county service areas, etc. to provide additional municipal services

U.S. Fish and Wildlife Service: Federal Endangered Species Act consultation

U.S. Army Corps of Engineers: Clean Water Act Section 404 permitting

Placer County Flood Control and Water Conservation District: Consultation regarding drainage and flood control

CHAPTER 4

PROJECT ALTERNATIVES

4.1 DESCRIPTION OF PROJECT ALTERNATIVES

4.1.1 INTRODUCTION

The California Environmental Quality Act and the implementing State CEQA Guidelines require that alternatives to the proposed project be discussed in the EIR. The value of such discussion is to inform public decision-makers of the differential environmental impacts which may be associated with each potential alternative, and to enable a reasoned judgement to be made as to which alternative to the proposed project may be environmentally superior. Section 15126.6 of the CEQA Guidelines provides the following description of what should be included in the alternatives discussion in an EIR:

(a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

(b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

(c) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed

consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

(d) **Evaluation of Alternatives.** The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the project. A Matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

(e) **“No Project” alternative.**

(1) The specific alternative of “no project” shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project’s environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).

(2) The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

(3) A discussion of the “no project” alternative will usually proceed along one of two lines:

(A) When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the “no project” alternative will be the continuation of the plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

(B) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project

is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

(C) After defining the no project alternative using one of these approaches, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

(f) Rule of reason. The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determine could feasibly attain most of the basis objectives of the project. The range of reasonable alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

(1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

(2) Alternative locations.

(A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

(B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.

(C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative.

(3) An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The sections of this Chapter that follow present a description of the alternatives considered and an analysis of the alternatives in the context of CEQA and the State CEQA Guidelines. Alternative locations were not discussed because there are no areas within Placer County, other than the Plan area, that are appropriate for consideration of the Foresthill Divide Community Plan. The Placer County General Plan specifically provides for 22 areas in the county to be addressed in Community Plans, one of which is the Foresthill Divide.

The range of alternatives that are addressed include an evaluation of the no project alternative (which is required to be addressed), a Highest Density Alternative, a Lowest Density Alternative, and a Reduced Density Alternative. The Highest and Lowest Density Alternatives represent the high and low ranges, respectively, of a total of five conceptual alternatives that were reviewed and considered by the FDCP Team in one of their Town Hall meetings.

Because the proposed project is a community plan prepared in accordance with, and as a part of, the Placer County General Plan, no alternative location for the Foresthill Divide Community Plan was considered. Consideration of such an alternative under these circumstances would be infeasible. An analysis of the comparative environmental superiority of the various alternatives is also provided as required by CEQA.

4.1.2 NO PROJECT ALTERNATIVE

In accordance with Section 15126.6(e)(3)(A) presented above, the No Project alternative consists of an analysis of the continuation of the existing plan, in which case the Plan area will be developed in accordance with the existing Foresthill General Plan without adoption of the FDCP (“No Project/Development Consistent with General Plan” Alternative). Under this alternative, the projected impacts of the proposed FDCP are compared to the impacts that would occur under the existing Foresthill General Plan. The existing Foresthill General Plan is shown in Figures 4-1 and 4-2. The 1981 Foresthill General Plan encompassed approximately 56 square miles, compared to 109 square miles within the FDCP area. It has an estimated buildout population of 28,000±, compared to an estimated 13,500 for the FDCP. The additional area encompassed by the FDCP would develop in accordance with the Placer County General Plan or the Weimar/Clipper Gap/Applegate General Plan, depending upon the location.

4.1.3 HIGHEST DENSITY ALTERNATIVE

The Highest Density Alternative was considered and rejected by the FDCP Team. The Highest Density Alternative is shown in Figure 4-3 (the map shows residential areas only; other uses would be the same as the proposed FDCP). The Highest Density Alternative would accommodate a buildout population of 28,355 residents, compared to the FDCP buildout estimate of 13,500. In comparison to the proposed FDCP, densities in residential areas would be higher: residential densities in many areas are doubled, and many areas shown in the proposed FDCP for Ag/Timberland uses are shown for residential uses (primarily at densities ranging from 2.3 du/acre to 4.6 du/acre) in the Highest Density Alternative. The estimated population for this alternative at buildout (28,355) is comparable to the estimated buildout population for the existing 1981 Foresthill General Plan. The FDCP Team rejected this alternative because it was not consistent with the Vision and General Goals formulated by the Team, which are described in Chapter Two of this EIR.

As cited above in Section 15126.6(f), “The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.” That is not the case for the Highest Density Alternative; however, it is evaluated in this EIR because it is an actual alternative that was considered and rejected in the process of developing the FDCP.

4.1.4 LOWEST DENSITY ALTERNATIVE

The Lowest Density Alternative was also considered and rejected by the FDCP Team. The Lowest Density Alternative is shown in Figure 4-4 (the map shows residential uses only; other uses would be the same as the proposed FDCP). The Lowest Density Alternative would accommodate a buildout population of 12,727 residents, slightly lower than the FDCP buildout estimate of 13,500. In comparison to the proposed FDCP, densities in residential areas would be reduced in the Todd’s Valley area, the Pomfret Estate (“Forest Ranch”) property, and some properties along Foresthill Road between Todd’s Valley and the Pomfret Estate property. The FDCP Team rejected this alternative because it was not consistent with the general goals and vision for the Community Plan area, which call for concentrating population and residential development near the Core Area of Foresthill.

4.1.5 REDUCED DENSITY ALTERNATIVE

A Reduced Density Alternative has been developed for consideration in this EIR. There is no map available for this alternative; however, it would accommodate a buildout population of 9,250 residents, approximately the midpoint between the FDCP buildout estimate of 13,500 and existing conditions in terms of population and housing units. It would require reducing residential densities throughout the Plan area, with the exception of areas that are already subdivided.

4.2 COMPARATIVE ANALYSIS OF PROJECT ALTERNATIVES

4.2.1 NO PROJECT ALTERNATIVE

As described above, the No Project Alternative is continuation of the existing 1981 Foresthill General Plan. Since adoption of the 1981 Foresthill General Plan, there have been several changes to the affected area. The Plan area has been enlarged from a 56 square mile Plan area to an approximately 109 square mile Plan area. The proposed Plan area encompasses more of the Foresthill Divide, and more accurately represents a fairly cohesive, yet spread-out, geographical community.

Construction of the Sugar Pine Reservoir Dam has been completed, and Sugar Pine Reservoir now provides drinking water to the majority of residents within the Plan area. The reservoir is currently owned by the U.S. Bureau of Reclamation (BOR) and operated by the Foresthill Public Utility District (Foresthill PUD). The District is in the process of purchasing the facilities from the BOR.

The solid waste disposal site in Foresthill, operated by the Bureau of Reclamation, has closed since the adoption of the 1981 General Plan. The site is currently being used as a transfer station, from which waste is transferred to the County's Western Regional Landfill near Roseville.

The 1981 Foresthill General Plan is also based on several assumptions that have proven to be faulty since the Plan was adopted in 1981. These include the following assumptions: (1) that the population growth rate would be fairly high (annual growth rate of 7.8 percent) in the Plan area; (2) completion of the Auburn Dam within the planning period; and (3) that forest products would continue to be a primary source of revenue and employment within the Plan area (the two lumber mills operating in 1981 have since closed).

The following subjects have been analyzed in comparison to the existing Plan area conditions and the proposed FDCP.

Population and Housing

The 1981 Foresthill General Plan assumed that population growth in the Plan area (which at 56 square miles is approximately one-half the geographic size of the proposed FDCP Plan area, at 109 square miles) would increase at a fairly high annual rate of 7.8 percent (consistent with population growth in the area over the previous decade). That would result in a Plan area population of approximately 11,900 by 2002. In fact, population growth in both the Foresthill General Plan area and the proposed FDCP Plan area has been considerably lower, and the proposed FDCP assumes an annual growth rate of between one and two percent. The Foresthill General Plan states that it allows for a holding capacity of 14,400; however, analysis of the 1981 General Plan during preparation of the FDCP revealed that the land use designations and zoning accommodated by the 1981 General Plan would actually allow for a population holding capacity of 28,000±. The holding capacity of the proposed FDCP is estimated at 13,500±. The number of housing units accommodated by the FDCP would similarly be lower, with the number of new housing units that could be built in the Plan area estimated to be 2,380. Compared to the

proposed FDCP, impacts of the No Project Alternative (the 1981 Foresthill General Plan) on population and housing would be greater because it would accommodate more population growth and housing units. The 1981 Foresthill General Plan is based on out-of-date assumptions regarding population growth rate in the Plan area.

Land Use

The majority of the Plan area is forested and/or part of the steeply sloping topography that slopes to the Middle and North Forks of the American River. Development is primarily concentrated in areas where it can be sustained, including Foresthill, the Todd's Valley Subdivision, Baker Ranch, Michigan Bluff, and Yankee Jim's areas. Land use within the Foresthill townsite consists of commercial uses, industrial uses, and scattered public uses along the Foresthill Road corridor. Medium and low density and rural residential uses are an integral part of the townsite as well. Timberland Production Zones exist immediately southwest of the townsite.

The 1981 Foresthill General Plan includes the following discussion of land use districts included in the Plan (the locations of the various land uses are shown in Figure 4-1):

Residential

The proposed land use map shows a range of residential land uses to accommodate the maximum projected population of 11,900 people by the year 2000. The range spans from "Medium Density Residential" (4 – 10 units per acre) to Forestry (20 to 160 acre minimum). The residential holding capacity of the proposed plan is approximately 14,400 as compared to the 54,000 people allowed under the existing zoning. [See conclusion regarding actual holding capacity of the Plan under "Population and Housing" above.]

The higher density residential areas proposed are shown in the central townsite and surrounding area as well as the existing Todd Valley Subdivision. Some of the properties in the outlying areas are proposed for Forestry Residential designation (4.6 – 20 acre minimum) with the majority of the area between the townsite and Spring Garden Road in the 2.3 – 4.6 acre range and the choice timber producing property being designated Forestry (20 – 160 acre minimum). The purpose for maintaining larger parcel sizes outside of the townsite area is to encourage higher density residential areas near the existing commercial townsite and to preserve the timber producing lands in the outlying areas.

The Plan, as adopted by the Board, attempts to concentrate density around the townsite and within the boundaries of the Foresthill Public Utility District and to maintain the outlying areas for forestry uses.

Commercial

The primary commercial area in the plan is recommended to remain in the existing downtown core area. Satellite commercial areas reflecting existing uses are shown at the Monte Verde Inn and in the townsite of Baker Ranch. At the

hearing of April 20, 1981 at the Board of Supervisors, it was determined that a Planning Reserve designation be established to allow for multiple uses including additional commercial in the general vicinity of Ponderosa Way at Auburn-Foresthill Road. While no specific area is identified on the Land Use Map at this time, the Planning Commission can consider the merits of a complete development plan in this area at the appropriate time...

Industrial

The proposed plan recognizes the two industrial lumber mill uses in the plan area. It is also recommended that property across Auburn-Foresthill Road from the Bendix Mill be designated Industrial to ensure compatibility of land uses in the future. An additional industrial site is proposed for future need off Auburn-Foresthill Road near the existing dumpsite. This area was chosen because it minimized traffic and visual pollution problems.

Forest and Forest Residential

The main emphasis of this plan is to preserve the valuable timber resources and general rural character of the Foresthill area. The recommended range of parcel sizes of 4.6 to 160 acre minimum for the Forest and Forest Residential districts reflects this desire to protect timber producing property from dense residential encroachment while also serving to maintain a strong rural identity in the area. Consideration was also given to soil types, slope, geology, water quality, and sewage disposal in determining the recommended parcel sizes.

The clustering of housing units is encouraged in the Forest and Forest Residential designation to take advantage of available services and maximize open space areas.

A more detailed analysis of land capabilities is performed as part of the precise zoning process when exact minimum parcel sizes are established for all properties within the plan area.

Rural Estate

A large portion of the western area of the Plan has been designated Rural Estate, 2.3 – 4.6 acre minimum. With this adoption, the Board directed that the basic zone district establish large minimal parcel sizes to discourage the parcel map or “lot-and-block” subdivision approach, and encourage higher densities, where feasible, through “Land Use Intensity” designations for planned unit developments.

Planning Reserve

The intent of the Planning Reserve District is to allow an area to be set aside for a broad range of commercial and multiple residential uses based on the future needs of the community. Uses could range from retail commercial, duplex-fourplex

units, mobilehome parks, professional offices or public service buildings. Proposed uses in this area would require the filing of a rezoning application along with the filing of a specific plan containing the provisions specified in Section 65451 of Title 7 (Planning) of the California Government Code. Such provisions include the location of all housing, business, industry, open space, public buildings and grounds, among other uses. It also includes the location of streets and roads, standards for population and building density, along with water supply and sewage disposal. With the adoption of the Plan on April 20, 1981, the Board of Supervisors proposed that a nonspecific site be kept for Planning Reserve purposes and that it generally be sited in the area near the Ponderosa Way-Auburn-Foresthill Road intersection.

Other

Also designated on the plan are proposed and existing parks, fire stations, schools and other public and quasi-public uses. These are discussed in detail in the Public Services and Safety sections of this plan.

Residential densities in the 1981 Foresthill General Plan have been decreased by more than half under the proposed FDCP. As described in the proposed FDCP, the Foresthill Divide is unique in many ways, and is not suited to standard land use planning techniques. As an example, to provide a resident population in the downtown area, the Plan provides for Mixed-Use Areas that allows for many different activities to occur within those areas. Retail commercial uses, offices, public service buildings, and other traditional downtown businesses will be mixed with single-family and multi-family residential uses (perhaps even within the same building) in the Historic Downtown Mixed-Use Area. A downtown resident population is anticipated to be the catalyst for more community events, and help create a pedestrian-friendly neighborhood reminiscent of the historic era represented by the architectural styles of the existing buildings in that area.

Another difference between the 1981 General Plan and the proposed FDCP is the special treatment of the old mill site at the west end of the historic downtown district in the FDCP. More than half the old mill site will be utilized for the new high school, a new elementary school and a forest education facility. The Mill Site Mixed-Use Area immediately adjacent to the school site will house job-generating businesses. This site will require careful planning to accommodate all of these existing and proposed new uses.

The Canyon Mixed-Use Area extends from the Foresthill Road/Mosquito Ridge Road “Y” west to the medical building on the south side of Foresthill Road from the church west to the Starlite Café on the north side of Foresthill Road. This district will provide for retail commercial, tourist commercial, single and multi-family residential, and other uses while taking advantage of the phenomenal view of the Sierra Nevada to the east.

These mixed-used districts are one way to accomplish one of the primary goals of the FDCP: that higher residential densities should be located near the core of the community (defined as the area that extends from Foresthill Elementary School westerly to Foresthill Divide Middle School). The Plan also concentrates higher residential densities east of the historic downtown district to provide local traffic circulation throughout the “downtown” area.

Compared to the proposed FDCP, the No Project Alternative (1981 Foresthill General Plan) would allow higher residential densities, would allow more land to be converted from rural open space to rural residential uses, and would not allow for mixed uses in the Core Area. It is based on out-of-date assumptions regarding population growth rate and industrial uses. Commercial development in the FDCP is limited to the “Core Area” and three identified small outlying commercial areas. Private forest holdings and agricultural interests will continue to exist with protection from development pressure and adjacent development activities, and an open space designation has been applied to public lands. The Mixed-Use Areas in the FDCP provide greater certainty to potential developers and the community than the Planning Reserve designation in the 1981 Foresthill General Plan, which was not applied to specific properties. Overall, the land use policies of the FDCP are more protective of the environment than the policies of the 1981 Foresthill General Plan.

Community Design

The 1981 Foresthill General Plan contains few policies relating to community design. Policies for scenic highways include encouraging and utilizing existing County programs for protection and enhancement of scenic corridors, including design review, sign control, undergrounding utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts. It also provides for landscaping and landscaped mounding where desirable to maintain and improve scenic qualities and screen unsightly views. It requires the use of aesthetic design considerations for road construction, reconstruction, or maintenance for scenic highways, and encourages anti-litter, beautification and clean-up programs along scenic routes (identified as Auburn-Foresthill Road and Ruck-A-Chucky Route). It also recommends that there be a citizens’ design review committee to carefully review any proposed commercial development to assure that the location and appearance of the buildings, landscaping, and parking are consistent with the historic and rural character of the area. It requires design control for all new commercial development, remodeling of old facilities, and industrial development visible from major roads. It does not address light and glare.

The proposed FDCP contains much stronger and more specific requirements for community design in the Plan area. In addition to requiring compliance with the Placer County Rural Design Guidelines and the Placer County Design Guidelines Manual, the Community Design goals and policies provide clear direction regarding building design, signs and lighting in the Plan area. The FDCP also includes proposed Foresthill Community Design Guidelines, which are intended to preserve the FDCP’s historic built environment and guide future design. The proposed FDCP also includes policies designed to minimize light and glare associated with new development.

Public Facilities

The 1981 Foresthill General Plan contains one goal and four policies regarding public services which are very general in nature. It encourages the long term use of individual sewage disposal systems, encourages cluster developments to minimize environmental degradation, requires that adequate services are available for proposed developments prior to approval, and encourages mitigation measures for new developments to reduce the impacts on local services. Information about public services contained in the Plan is outdated. The proposed FDCP contains up-to-date

information, and in addition to general goals and policies, includes goals and policies specifically directed at ensuring the adequacy and timely provision of the following public facilities and services: sewage disposal, water supply, education/schools, fire protection, public protection, drainage and water quality, public utilities, and other public services.

Parks and Recreation

The 1981 Foresthill General Plan identifies two existing parks in the Plan area and two sites in the Todd Valley Estates subdivision that were dedicated to the County as future park sites. The Plan assumes that with completion of the Auburn Dam project, the recreation potential of the area would be expanded, although some recreation activities (e.g., rafting, gold mining) would be lost. The Foresthill General Plan encourages development of recreation facilities, encourages future park sites to be located near other public facilities, provides for adequate riding and hiking trails, and requires park dedication fees to ensure funding for future park needs. The proposed FDCP establishes park development standards and park facility standards, requires new subdivisions to be included in a type of financing district to generate sufficient funds to operate and maintain new public park facilities, and recommends expanding the powers of the Foresthill P.U.D. or creating a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs in the community. The FDCP provides greater direction than the Foresthill General Plan regarding development of a system of interconnected hiking, riding and bike trails suitable for active recreation, transportation and circulation. Development of new linkages between trails and connecting trail systems have been identified as a priority in the FDCP.

Natural Resources/Conservation/Open Space

The 1981 Foresthill General Plan includes an Environmental Resources Management Element that addresses open space, seismic safety, conservation, recreation and parks, historical and archaeological sites, and a summary of information on natural resources. Policies of this Element including encouraging the following actions or practices: agricultural land preservation; development in areas of least environmental sensitivity; the use of ecologically innovative techniques in future development; professional, multiple use forest practices on timber producing lands; locating residential and commercial development away from areas of high timber or agricultural production; scenic or greenbelt corridors along major transportation routes; and retention of the rural, pastoral characteristics of the area. The Element also provides for reviewing proposed developments for their potential adverse effect on air and water quality, monitoring and controlling existing land uses that could deteriorate air and water quality, identification and preservation of all important fish and wildlife areas, providing for the protection of rare or endangered species, and preserving the natural condition of stream influence areas. Open space policies including encouraging scenic or greenbelt corridors along major transportation routes, encouraging public and private ownership maintenance of open space, preserving natural areas along creeks and canals, promoting taxation techniques to allow property owners to preserve their lands as open space, and protecting residents and property from seismic and geologic hazards.

The Resource Management Element of the proposed FDCP identifies and updates information on existing natural resources of the Plan area. The proposed Plan includes policies that are much

more specific and mandatory in nature for the following topics: vegetation, wetland and riparian areas, fish and wildlife habitat, agricultural resources, forest resources, water resources, soils, geology, open space, and visual resources. It recognizes the role of state and federal permitting requirements for natural resources that are not acknowledged in the 1981 Foresthill General Plan. While the 1981 General Plan demonstrated good intentions toward protection of natural resources, the proposed FDCP is more protective of the environment.

Cultural Resources

The 1981 Foresthill General Plan includes a brief description and one policy addressing historic sites, which is to continue the use of the Design Historic Zone District in areas of historical significance. The proposed FDCP includes an entire section on Cultural Resources (archaeological as well as historical) and numerous policies designed to identify and, to the extent possible, preserve archaeological and historical resources in the Plan area. The proposed FDCP is therefore more protective of cultural resources in the Foresthill Divide.

Air Quality

The Environmental Resources Management Element of the 1981 Foresthill General Plan includes two policies that address air quality: to continue to monitor and control existing land uses that could deteriorate air quality, and to review developments for their potential adverse effect on air and water quality. The proposed FDCP includes an entire section on Air Quality. Although the County does not and cannot control all emissions, the FDCP includes numerous policies designed to reduce emissions and preserve air quality in the Plan area.

Transportation and Circulation

The Transportation/Circulation Element of the 1981 Foresthill General Plan is very general in nature. It does not establish a Level of Service standard for Plan area roadways. It does recognize the constraints imposed by the dependence on Foresthill Road as the main access to Foresthill. It does not proposed new routes, but discusses a proposed roadway to connect Colfax with El Dorado County in conjunction with the Auburn Dam, which has never been built. The proposed FDCP establishes Level of Service standards for Plan area roadways, and also proposes three major roadway improvements: upgrading of Power Line Road, a Yankee Jim's Road connection to the new high school site, and the extension of Patent Road. Traffic calming measures are also proposed for the Core Area.

Noise

The Noise section of the 1981 Foresthill General Plan is very general in nature and does not establish measurable standards. The proposed FDCP does not include a Noise Element, but instead relies on the Noise Element of the Placer County General Plan, which does establish standards.

4.2.2 HIGHEST DENSITY ALTERNATIVE

The following subjects have been analyzed in comparison to the existing site conditions and the proposed project.

Population and Housing

This alternative would accommodate a buildout population of 28,355 residents, compared to the FDCP buildout estimate of 13,500. The number of new housing units that would be accommodated would be double what would be allowed by the FDCP. This would represent a substantial increase in the number of people and housing units currently in the Plan area. It is also unlikely that this growth rate would be achieved during the planning period.

Land Use

In comparison to the proposed FDCP, densities in residential areas would be higher: residential densities in many areas are doubled, and many areas shown in the proposed FDCP for Ag/Timberland uses are shown for residential uses (primarily at densities ranging from 2.3 du/acre to 4.6 du/acre) in the Highest Density Alternative. Other planned land uses would be the same as the proposed FDCP. This alternative would result in a substantially greater area in which development would occur, as well as the higher density of residential development, changing the rural, forested character that is a major focus of the proposed Plan. This alternative would represent a greater conversion of open space lands to rural or urbanized uses. Because the areas designated for commercial, industrial, and mixed-use would remain the same, but residential development would increase, the balance between jobs and housing in the Plan area would become less favorable.

Community Design

Many of the elements of community design included in the proposed FDCP could be applied to the Highest Density Alternative, including the Foresthill Community Design Guidelines. However, Goal 3.C.1. of the FDCP reads “Promote, preserve and enhance the forested nature of the Foresthill Divide and rural atmosphere of the Foresthill community by requiring high aesthetic quality in all new development.” As discussed under Land Use and Population and Housing above, doubling the residential densities and increasing the area planned for development would conflict to some degree with this goal, as well as policies designed to preserve the natural terrain, ridgelines and hilltops, and rural atmosphere. However, the aesthetic standards and design criteria of the proposed Design Guidelines could still be applied to new development under the Highest Density Alternative. Light and glare would potentially increase due to the greater number of structures.

Public Facilities

The Highest Density Alternative would require a higher level of services and additional public facilities in comparison to the proposed FDCP. Significant impacts would be anticipated to occur for several services and facilities. The adequacy of the water supply to serve that level of development is unknown. Additional schools and school sites would be needed to serve the Plan

area. Fire protection would need to be increased, including equipment and personnel (and possibly station expansion). At higher densities, use of individual wastewater disposal systems could become problematic and result in significant water quality impacts. Law enforcement, public utilities, and other public services would also be affected.

Parks and Recreation

The Highest Density Alternative would result in a greater demand for parks and recreational facilities and programs. New residential development would be required to dedicate land or pay in-lieu fees for new park sites. The proposed FDCP requires new subdivisions to be included in a type of financing district to generate sufficient funds to operate and maintain new public park facilities, and recommends expanding the powers of the Foresthill P.U.D. or creating a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs in the community. New development under the Highest Density Alternative would be subject to these requirements. Larger-scale new developments may also include private recreational facilities to serve residents.

Natural Resources/Conservation/Open Space

The proposed FDCP includes policies directed at protecting vegetation, wetland and riparian areas, fish and wildlife habitat, agricultural resources, forest resources, water resources, soils, areas of geologic hazards, open space and visual resources. However, with higher development densities and more areas planned for development, more open space will be converted to development, impacts on resources will be greater, and preservation of resources will be more difficult to attain.

Cultural Resources

Higher density development, and development of more areas, will increase the potential to disturb or destroy previously unidentified cultural resources in the Plan area.

Air Quality

Doubling the population to be accommodated in the Plan area would result in additional emissions of criteria pollutants from both stationary and mobile sources (i.e., additional vehicle trips). This would increase the severity of air quality impacts in the Plan area.

Transportation and Circulation

Doubling the population to be accommodated in the Plan area would cause more roadway segments to exceed proposed Level of Service standards, and would create more internal inconsistencies (or require a change in the Level of Service standard.) It would represent a substantial increase in traffic on roadways which have significant constraints upon further expansion, especially Foresthill Road, the Foresthill bridge, and the I-80/Foresthill Road interchange.

Noise

Due primarily to increased traffic on Plan area roadways, ambient noise levels would increase, especially in proximity to major roadways, and more people and residential uses would be exposed to noise levels that could exceed adopted standards. Traffic-related noise impacts would be potentially significant, but could normally be mitigated to a less than significant level on a project-by-project basis.

4.2.3 LOWEST DENSITY ALTERNATIVE

The following subjects have been analyzed in comparison to the existing site conditions and the proposed project.

Population and Housing

This alternative would accommodate a buildout population of 12,727 residents, compared to the FDCP buildout estimate of 13,500. The number of new housing units that would be accommodated would also be slightly lower than what would be allowed by the FDCP. This would represent an increase in the number of people and housing units currently in the Plan area similar to the proposed FDCP.

Land Use

In comparison to the proposed FDCP, densities in residential areas would be reduced in the Todd's Valley area, the Pomfret Estate ("Forest Ranch") property, and some properties along Foresthill Road between Todd's Valley and the Pomfret Estate property. Other planned land uses would be the same as the proposed FDCP. This alternative would result in a lower density of residential development, maintaining the rural, forested character in a manner similar to the proposed Plan. This alternative would represent a similar conversion of open space lands to rural or urbanized uses as the proposed FDCP.

Community Design

The elements of community design included in the proposed FDCP could be applied to the Lowest Density Alternative, including the Foresthill Community Design Guidelines. Goal 3.C.1. of the FDCP reads "Promote, preserve and enhance the forested nature of the Foresthill Divide and rural atmosphere of the Foresthill Community by requiring high aesthetic quality in all new development." Reducing the residential densities would be consistent with this goal, as well as policies designed to preserve the natural terrain, ridgelines and hilltops, and rural atmosphere. The aesthetic standards and design criteria of the proposed Design Guidelines would be applied to new development under the Lowest Density Alternative. Light and glare would slightly decrease due to the reduced number of structures.

Public Facilities

The Lowest Density Alternative would result in a slightly reduced demand for services and need for additional public facilities in comparison to the proposed FDCP. The only public service for

which a potentially significant impact has been identified for the FDCP is fire protection (since providing an increased level of service is outside the control of Placer County). For that reason, it would also be considered a potentially significant impact for the Lowest Density Alternative.

Parks and Recreation

The Lowest Density Alternative would result in a slightly reduced demand for parks and recreational facilities and programs in comparison to the FDCP. New residential development would be required to dedicate land or pay in-lieu fees for new park sites. The proposed FDCP requires new subdivisions to be included in a type of financing district to generate sufficient funds to operate and maintain new public park facilities, and recommends expanding the powers of the Foresthill P.U.D. or creating a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs in the community. New development under the Lowest Density Alternative would be subject to these requirements.

Natural Resources/Conservation/Open Space

The proposed FDCP includes policies directed at protecting vegetation, wetland and riparian areas, fish and wildlife habitat, agricultural resources, forest resources, water resources, soils, areas of geologic hazards, open space and visual resources. In comparison to the proposed FDCP, with lower development densities, a similar amount of open space will be converted to development, and impacts on resources and opportunities to preserve resources will be similar.

Cultural Resources

Lower density development, in comparison to the proposed FDCP, will reduce the potential to disturb or destroy previously unidentified cultural resources in the Plan area.

Air Quality

Reducing the population to be accommodated in the Plan area would result in reduced emissions of criteria pollutants from both stationary and mobile sources (i.e., reduced vehicular emissions). This would reduce the severity of air quality impacts in the Plan area; however, because the Plan area does not currently meet State and federal standards for ozone and particulate matter, cumulative impacts would remain significant and unavoidable.

Transportation and Circulation

Reducing the population to be accommodated in the Plan area might result in segments of Foresthill Road meeting the proposed Level of Service standards without requiring mitigation. It would represent a slight decrease in traffic on roadways which have significant constraints upon further expansion, especially Foresthill Road, the Foresthill Bridge, and the I-80/Foresthill Road interchange.

Noise

Due to slight reductions in traffic on Plan area roadways, ambient noise levels would slightly decrease, especially in proximity to major roadways. Fewer people and residential uses would be exposed to noise levels that could exceed adopted standards.

4.2.4 REDUCED DENSITY ALTERNATIVE

The following subjects have been analyzed in comparison to the existing site conditions and the proposed project.

Population and Housing

This alternative would accommodate a buildout population of 9,250 residents, compared to the FDCP buildout estimate of 13,500 and an existing estimated population of 5,600. The total number of housing units that would be accommodated would be 3,700, compared to 1,907 existing housing units and 2,380 new housing units that would be accommodated by the FDCP. This would represent an increase in the number of people and housing units currently in the Plan area, but would accommodate fewer people and housing units than the proposed FDCP, the Highest Density Alternative, or the Lowest Density Alternative.

Land Use

In comparison to the proposed FDCP, residential densities would be reduced in all areas, with the exception of areas that are already subdivided for residential development. Higher density residential development (6 or 8 dwelling units/acre) would not be accommodated, and some areas proposed for residential development in the FDCP would instead be designated for non-residential uses to achieve the density reductions. Other planned land uses would be similarly reduced in area because the lower population would not support the amount of commercial, industrial and mixed-use development accommodated by the FDCP. This alternative would result in a lower density of residential development, maintaining to a greater degree than the FDCP and the Highest and Lowest Density Alternatives the rural, forested character of the Plan area. This alternative would reduce the conversion of open space lands to rural or urbanized uses in comparison to the proposed FDCP and the Highest and Lowest Density Alternatives.

Community Design

The elements of community design included in the proposed FDCP could be applied to the Reduced Density Alternative, including the Foresthill Community Design Guidelines. Goal 3.C.1. of the FDCP reads “Promote, preserve and enhance the forested nature of the Foresthill Divide and rural atmosphere of the Foresthill Community by requiring high aesthetic quality in all new development.” Reducing residential densities would be consistent with this goal, as well as policies designed to preserve the natural terrain, ridgelines and hilltops, and rural atmosphere. The aesthetic standards and design criteria of the proposed Design Guidelines would be applied to new development under the Reduced Density Alternative. Light and glare would decrease in comparison to the FDCP and the Highest and Lowest Density Alternatives due to the reduced number of structures.

Public Facilities

The Reduced Density Alternative would result in a reduced demand for services and need for additional public facilities in comparison to the proposed FDCP and the Highest and Lowest Density Alternatives. The only public service for which a potentially significant impact has been identified for the FDCP is fire protection (since an impact has been identified and providing an increased level of service is outside the control of Placer County). For that reason, since development would still increase under the Reduced Density Alternative, it would also be considered a potentially significant impact for this alternative.

Parks and Recreation

The Reduced Density Alternative would result in a reduced demand for parks and recreational facilities and programs in comparison to the FDCP and the Highest and Lowest Density Alternatives. New residential development would be required to dedicate land or pay in-lieu fees for new park sites. The proposed FDCP requires new subdivisions to be included in a type of financing district to generate sufficient funds to operate and maintain new public park facilities, and recommends expanding the powers of the Foresthill P.U.D. or creating a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs in the community. New development under the Reduced Density Alternative would be subject to these requirements. However, the reduced number of housing units that would be developed would result in less funds generated to operate and maintain park facilities.

Natural Resources/Conservation/Open Space

The proposed FDCP includes policies directed at protecting vegetation, wetland and riparian areas, fish and wildlife habitat, agricultural resources, forest resources, water resources, soils, areas of geologic hazards, open space and visual resources. In comparison to the proposed FDCP and the Highest and Lowest Density Alternatives, with lower development densities, a reduced amount of open space will be converted to development, and opportunities to preserve resources will be increased.

Cultural Resources

Lower density development, in comparison to the proposed FDCP and Highest and Lowest Density Alternatives, will reduce the potential to disturb or destroy previously unidentified cultural resources in the Plan area.

Air Quality

Reducing the population to be accommodated in the Plan area would result in reduced emissions of criteria pollutants from both stationary and mobile sources (i.e., reduced vehicular emissions). This would reduce the severity of air quality impacts in the Plan area; however, because the Plan area does not currently meet State and federal standards for ozone and particulate matter, cumulative impacts would remain significant and unavoidable.

Transportation and Circulation

As discussed in Chapter Three of this EIR, under the proposed FDCP the projected Level of Service on certain segments of Foresthill Road at FDCP buildout would exceed the Level of Service standard in the proposed Plan. Reducing the population to be accommodated in the Plan area would result in those roadway segments meeting the proposed Level of Service standards with less mitigation required. It would represent a decrease in traffic on roadways which have significant constraints upon further expansion, especially Foresthill Road, the Foresthill Bridge, and the I-80/Foresthill Road interchange.

Noise

Due to reductions in traffic on Plan area roadways and reduced numbers of dwelling units adjacent to those roadways, ambient noise levels would decrease, especially in proximity to major roadways. Fewer people and residential uses would be exposed to noise levels that could exceed adopted standards.

4.3 CONCLUSIONS

In accordance with State CEQA Guidelines, a range of reasonable project alternatives has been evaluated to determine their comparative environmental superiority. The impacts of the proposed project that have been identified as significant, if not mitigated, include:

- Increased soil erosion and other soil-related hazards in the Plan area due to development in accordance with the proposed FDCP
- Adverse impacts on water quality in the Plan area and downstream due to wastewater generated by development in accordance with the proposed FDCP
- Water quality in the Plan area may be degraded following site development by the introduction of urban pollutants including vehicle oils and greases, heavy metals on roads, parking lots and driveways, fertilizers and pesticides used on site landscaping, and toxic compounds released from auto maintenance areas. Construction during wet or dry weather will affect water quality with increased sedimentation, operation and maintenance of construction vehicles, and storage of materials that could release contamination to surface waters
- Adverse impacts on special-status avian species in the Plan area due to development in accordance with the proposed FDCP
- Increased traffic throughout the Community Plan area due to development in accordance with the FDCP
- Noise impacts due to increased roadway traffic
- Noise impacts due to the introduction of additional stationary noise sources in the Plan area
- Interior noise impacts for all sources within the Plan area
- Noise from construction-related activities in the Plan area may exceed adopted noise standards

Significant impacts that cannot be fully mitigated include:

- Loss of open space resulting from development in accordance with the FDCP
- Introduction of new sources of light and glare within the Plan area
- Provision of adequate fire protection services and facilities to serve the Plan area
- Conversion of timber lands to non-timber production use
- Alteration of views from scenic highways in the Plan area due to development in accordance with the proposed FDCP
- Adverse impacts on riparian habitat in the Plan area due to development in accordance with the proposed FDCP
- Adverse impacts on wildlife movement corridors/deer migration corridors in the Plan area due to development in accordance with the proposed FDCP
- New stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP will result in increased emissions of ROG, NO_x, CO and PM₁₀
- Construction activities associated with development under the proposed FDCP will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations

Accordingly, alternatives that reduce or avoid these impacts represent environmentally superior alternatives to the proposed project. As described at the beginning of this Chapter, if the environmentally superior alternative is the “no project” alternative, the EIR must also identify an environmentally superior alternative among the remaining alternatives.

Based upon the analysis contained and documented in Chapter Three of this EIR and the analysis presented above, the Reduced Density Alternative has been determined to be the environmentally superior alternative because it would have the fewest impacts on the existing environment. However, this alternative would not be consistent with the general goals and vision for the Community Plan area, because the reduced population would probably not support the mixed-use development and job-generating uses proposed in the FDCP. Both the “No Project” and “Highest Density” Alternatives would allow substantially greater densities and areas planned for development, and the “Lowest Density” Alternative would have impacts similar to the proposed FDCP.

CHAPTER 3

ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

3.1 POPULATION AND HOUSING

3.1.1 INTRODUCTION

The Population and Housing section of this EIR describes the existing and projected population and housing in Placer County and the Plan area. Estimates of the changes to those levels that could be created by development proposed in the FDCP are identified in this section.

Changes in the demographics of an area resulting from new development do not necessarily cause direct adverse physical environmental impacts, but can cause indirect effects such as increased traffic and increases in ambient noise levels. The 1994 Placer County General Plan EIR indicated that a “substantial” increase in population (page 3-13) would not, by itself, create an environmental impact. Rather, the increase could have adverse indirect impacts.

The purpose of this section is to identify and evaluate population and housing changes caused by the proposed FDCP that have the potential to cause physical environmental effects. The environmental effects of the demographic changes caused by the proposed FDCP identified in this section are either evaluated in this section, or in the other applicable sections contained in Chapter Three of this EIR.

Changes in population are generally characterized as social and economic effects. CEQA provides that an economic or social effect of a project shall not by itself be considered a significant effect on the environment (CEQA Guidelines Section 15382). The direction for treatment of economic and social effects is restated in Section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

3.1.2 SETTING

PURPOSE

The purpose of the Population and Housing section of the FDCP is to discuss historic and projected population growth and to determine present and future housing needs in the Foresthill

Divide Community Plan area, with the ultimate goal of providing adequate housing for all economic segments of the community.

The goals, objectives and policies of the Placer County General Plan (PCGP) Housing Element apply within the Plan area. This section includes more specific housing and population information pertaining to the Foresthill Divide Community Plan area.

Population projections provided by outside agencies may not accurately reflect actual conditions in the Foresthill Divide. As Placer County continues to grow at record rates, the unincorporated areas will absorb growth from individuals and families seeking rural lifestyles. Depending upon the growth rate experienced by the Plan area, the Foresthill Divide could experience up to a 62 percent population increase within the next 10 years. Regional housing opportunities must be available to people of all economic backgrounds.

The Housing Element is one of the seven mandatory General Plan elements. All of the topics required to be addressed in a Housing Element by State law are covered in the Placer County General Plan Housing Element. The purpose of the Population and Housing section of the Foresthill Divide Community Plan is to address topics specific to the Plan area, which are of particular interest to residents of the Divide.

POPULATION

Foresthill has a long history of human habitation beginning with the Martis people, a tribe of hunter-gatherers who were displaced by the Southern Maidu several thousand years ago. According to the Foresthill Historical Society, in the spring of 1850, large numbers of miners came to the Foresthill Divide in search of gold. By 1880, Foresthill was one of the largest towns in Placer County with a population of 688 persons (Historical U.S. Census Populations of Places, Towns, and Cities in California). After the peak of the Gold Rush, the population began to decline, and by 1890, the population was reduced to 650 persons.

Population projections play a major role in the formulation of a community plan. They are an important factor in determining land use as well as in the design of transportation and public service facilities to accommodate the anticipated growth. Care must be taken in the use of population projections, since they are based on assumptions as to what will occur in the future. Unforeseen changes in the social or economic climate of an area, as witnessed by the history of habitation in Foresthill, can significantly alter the actual growth rate.

According to the California Department of Finance (DOF), Placer County is experiencing the fifth highest percentage increase in growth rate of California counties. The County has an estimated January 1, 2002 population of 264,900, and the growth rate continues to exceed that of the state and the greater Sacramento area. Foresthill and other unincorporated areas will absorb a portion of this growth, but geographical isolation, rugged terrain, and proactive community planning will slow growth to a rate that will not exceed buildout capacity.

Available population data for the Foresthill Divide varies according to the source and the geographical area that it covers. For example, 1990 Census data available for the community of

Foresthill shows a total population of 1,409 persons. However, the Foresthill Divide Community Plan covers an area much larger than the Foresthill townsite and Todd's Valley area, where the population is concentrated. Census Tract 202 roughly correlates with, but is larger than, the Plan area; 1990 Census data gives a population of 4,699 persons for this area. However, based on knowledge of the area, the County and the Foresthill Divide Community Plan Team believe that an undercount occurred in the 1990 Census. Estimates from the Sacramento Area Council of Governments (SACOG) show a 1990 population of 3,400. These population counts and projections for Placer County, the unincorporated areas, and the community of Foresthill are shown in Table 3.1-1. The "Regional Analysis District" used by SACOG for Foresthill is smaller than the Community Plan area, but does include the principal population and employment centers.

Table 3.1-1 Population Projections

Geographical Area	Population 1990	Population 2000	Population 2005	Population 2010	Population 2015	Population 2020
Placer County (1)	174,979	243,646	287,401	325,648	358,746	391,245
Unincorporated Area (2)	83,475	88,200	101,300	121,400	136,500	148,200
Foresthill (2)	3,400	4,012	4,247	4,399	5,168	5,953

Source: (1) DOF, (2) SACOG.

The County of Placer estimates the current population of the Plan area to be 5,600 persons. Using a method of extrapolation, based on a percentage of the County unincorporated population, current population estimates and projections have been calculated for the Plan area. In conjunction with the Foresthill Divide Community Plan Team, the County has calculated projected populations through the year 2010. Based on the 1996 population of 5,520, four different growth rate percentages have been imposed to replicate different growth scenarios. Projection A is based on the assumption that the Foresthill Divide area will grow at an annual rate of 1.5 percent, based on the average annual growth rate for the unincorporated area of Placer County. This projection leads to the conclusion that 6,467 people will reside in the Plan area by 2010. Projection B is derived from the Placer County General Plan population projections, and is based upon a variety of assumptions. Table 3.1-2 summarizes this information. This projection would indicate that 7,033 people would reside in the Plan area by 2010. The Community Plan Team has considered additional growth rates of 3 and 4 percent, which would result in 2010 populations of 7,941 and 9,091, respectively. When the Plan area reaches its holding capacity, which occurs when the area is completely built out, the total population is projected to be no more than 13,500 persons.

HOUSING

As stated in the *General Plan Guidelines*, the local regulation of the housing supply through planning and zoning powers affects the State's ability to achieve the State housing goal of "decent housing and a suitable living environment for every California family," and is an important influence on housing costs. The regional housing needs allocation process addresses this statewide concern, and reflects shared responsibility among local governments for accommodating the housing needs of all economic levels.

Table 3.1-2 Growth Scenarios in Plan Area

Population 1996	Percent Growth	Population 2010	Population Increase 1996-2010
A. 5,520	1.5%*	6,467	1,217
B. 5,520	2.11%**	7,033	1,783
C. 5,520	3.00%	7,941	2,691
D. 5,520	4.00%	9,091	3,841

* Average Annual Growth rate for the unincorporated area of Placer County

** Based on Placer County General Plan population projections for years 2010 and 2040

Source: Placer County Planning Department.

The primary housing type in the Foresthill Divide Community Plan area is the single-family dwelling, with 85 percent of units being of that type. Eleven percent of housing units within the Plan area are mobile homes, and 4 percent are multi-family dwelling units, as shown in Table 3.1-3. The predominance of single-family housing units is a reflection of the demand for this type of housing, the rural character of the Plan area, and the supporting infrastructure. Many people move to the area with their primary employment in the Auburn-Roseville-Sacramento region.

The need for future housing is based on the community's projected population. These increased population figures would indicate a demand for approximately 487 additional housing units by the year 2010 based on Projection A, determined by the average annual growth rate for the unincorporated area of Placer County. Population increase based on Projection B, derived from the historical growth rate experienced within the Plan area from 1990 to 1996, would result in the need for 713 additional housing units. Slightly higher growth rates would result in the need for 1,076 additional housing units based on Projection C, and 1,536 additional housing units based on Projection D, as illustrated in Table 3.1-4. The population figure used in Table 3.1-4 corresponds to the figure used by Placer County and the Community Plan Team for the Foresthill Divide Community Plan.

Table 3.1-5 indicates that as many as 118 additional mobile home park units will be needed in the Plan area by 2010, and up to 43 units of multi-family housing will be needed as well. Single family housing will continue to be the dominant housing type, and assuming a 3 percent growth rate, 915 additional units will be needed.

As mandated by the State of California, Placer County is required to demonstrate a commitment to accommodate its fair share of affordable housing as determined by the appropriate regional housing need. This regional housing needs allocation has been determined by the Sacramento Area Council of Governments (SACOG) for the period between 2000 and 2007, and is shown in Table 3.1-6. The housing need identified here is for the Foresthill Divide Community Plan area.

Because the majority of working residents commute off the Foresthill Divide for work, the Plan area is affected by a jobs-housing imbalance. This means that the majority of residents must leave the community for work, thus creating an imbalance within the local community. Most California communities seek a jobs-housing balance, and some have adopted strict policies in order to accomplish this. A parity between the number of jobs and the number of employed

residents is the most reliable way of minimizing work-related travel, especially if residents' skills, job requirements, and the cost and availability of housing can be closely matched. Ongoing efforts to increase employment opportunities for residents of the Foresthill Divide will benefit and strengthen the local economy and community.

Table 3.1-3 Foresthill Divide Housing Types, 1996

Housing Type	Housing Units	Vacant Units	Occupied Units
Single Family Dwelling	1,743	87	1,656
Multi-Family (2-4)	90	5	85
Mobile Home Park	222	11	211
TOTAL	2,055	103	1,952

NOTE: These figures were derived from the 1990 census and the number of building permits issued within census tract 202 between 1990 and 1996. These figures assume that all the building permits issued resulted in the construction of a new dwelling unit.

VACANCY RATE: The 1990 census indicated a vacancy rate of 17.35% for census tract 202. This appeared to be a very high rate for an area that is not considered a resort community. A vacancy rate of 5% represents a more common vacancy rate for a non-resort community.

Source: Placer County Planning Department.

Table 3.1-4 Projected Foresthill Divide Housing Need

Population 1996	Percent Growth	Population 2010	Population Increase 1996-2010	Average Household Size	# of New Units Needed
A. 5,520	1.5%*	6,467	1,217	2.5**	487
B. 5,520	2.11%***	7,033	1,783	2.5	713
C. 5,520	3.00%	7,941	2,691	2.5	1,076
D. 5,520	4.00%	9,091	3,841	2.5	1,536

* Average Annual Growth rate for the unincorporated area of Placer County

(Source: Placer County General Plan Background Report)

** This is the figure used in the Placer County Housing Element for population projections for the years 2010 and 2040 (Source: Placer County General Plan Background Report)

*** Historical Growth rate experienced in the FDCP area between 1990 and 1996 (Source: SACOG)

Source: Placer County Planning Department.

Table 3.1-5 Projected Foresthill Divide Housing Need by Housing Type

% of Housing Type	Existing Housing Type	Units 1996	Additional Units 2020		
			1.5% Growth	2.1% Growth	3.0% Growth
85%	Single Family	1,743	414	606	915
11%	Mobile Home Park	222	54	78	118
4%	Multi-Family	90	19	29	43
TOTAL		2,055	487	713	1,076

Source: Placer County Planning Department.

Table 3.1-6 Unincorporated Placer County Regional Housing Allocation, 2000-2007

Income Category	Annual Income*	Monthly Housing Costs	2000 – 2007** Additional Housing Units Needed for Plan Area
Very Low	\$ 19,700 – \$ 30,400	\$ 493 – \$ 760	69
Low	\$ 31,550 – \$48,650	\$ 789 – \$ 1,216	52
Moderate	\$ 39,400 – \$ 60,800	\$ 985 – \$ 1,520	67
Above Moderate	\$ 47,300 – \$ 72,950	\$ 1,183 – \$ 1,824	143

* Range reflects 1-8 persons per household. Information from the Department of Housing and Community Development

** Information from SACOG, Housing Needs Plan for the SACOG Region, September 2001. These figures represent the percentage of households in the County located within the Foresthill Divide Community Plan area.

Source: Placer County Planning Department.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to population and housing:

Goal 3.A.1. Enhance the quality of residential development on the Foresthill Divide.

Policies

3.A.1-1 The County shall encourage residential development in Foresthill of high architectural and physical quality, compatible with neighboring land uses.

3.A.1-2 The County shall encourage the replacement or renovation of all substandard housing and improve deteriorating residential areas through continued enforcement of building, zoning, health, and safety codes.

Goal 3.A.2. Provide a continuing supply of affordable housing to meet the needs of existing and future Placer County residents in all income categories.

Policies

- 3.A.2-1 The County shall adopt policies, programs and procedures with the intent of achieving its fair share regional housing allocation, including the numbers of units for each income classification.
- 3.A.2-2 The County shall encourage the construction of second residential units on properties that meet the development standards (e.g., adequate water supply, adequate septic system, etc.) as a means of increasing the supply of affordable housing.
- 3.A.2-3 The County shall encourage the development of a commercial/residential Mixed-Use area in the Core Area to augment the supply of housing and increase affordable housing opportunities on the Foresthill Divide.

Goal 3.A.3. Conserve the current stock of affordable housing on the Foresthill Divide.

Policies

- 3.A.3-1 The County shall continue to make rehabilitation loans to low income households from its Community Development Block Grant (CDBG) program revolving loan funds.
- 3.A.3-2 The County shall continue to apply for CDBG, HOME and other similar State and Federal funding for the purpose of rehabilitating low cost, owner-occupied, and rental housing.
- 3.A.3-3 The County shall encourage private financing of the rehabilitation of housing.
- 3.A.3-4 The County shall discourage the conversion of mobile home parks to other types of housing and to other land uses.
- 3.A.3-5 The County shall require the abatement of unsafe structures, while giving property owners ample time to correct deficiencies. Residents displaced by such abatement should be provided relocation assistance.
- 3.A.3-6 The County will support efforts to convert mobile home parks where residents lease their spaces to parks where residents own their spaces.

3.1.3 IMPACT EVALUATION CRITERIA

A project is generally viewed as having an adverse impact on population if it has the potential to substantially alter the location, distribution, density or growth rate of the population of an area, thus increasing the likelihood of adverse environmental impacts. For the purposes of this EIR, a significant environmental impact would occur if the proposed FDCP would:

- Exceed the regional population projections; or
- Create substantial unplanned growth or concentration of people.

For the purposes of this EIR, a significant environmental impact for housing would occur if the proposed FDCP would:

- Not conform with the jobs/housing policies of the *Placer County General Plan*, which consist of the following:

Goal 1.M: To work toward a jobs-housing balance.

Policies

- 1.M.1 The County shall concentrate most new growth within existing communities emphasizing infill development, intensified use of existing development, and expanded services so individual communities become more complete, diverse, and balanced.
 - 1.M.2 The County shall encourage large residential projects to be phased or timed to occur simultaneously with development that will provide primary wage earner jobs.
 - 1.M.3 The County shall encourage the creation of primary wage-earner jobs, or housing which meets projected income levels, in those areas of Placer County where an imbalance between jobs and housing exists.
- Not be in compliance with the Housing Element of the *Placer County General Plan*, which calls for 26.2% of the new housing in Placer County to be very low income, and 20.8% to be low income.
 - Substantially affect the housing supply or create a substantial demand for additional housing by not providing a variety of housing types and opportunities.

3.1.4 IMPACTS AND MITIGATION MEASURES

3.1-1 Development in accordance with the FDCP would increase the population in the Plan area.

As presented in the “Setting” discussion above, the estimated population of the Plan area for 2000 is 5,600. The population projection for 2010 is a range from 6,467 to 9,091, and the estimated maximum buildout population for the Plan area is 13,500. This is within the context of the population of Placer County, which was 243,646 in 2000, a projected 325,648 in 2010, and a projected 391,245 in 2020. The proposed FDCP represents a substantial reduction in the buildout population of the existing 1981 Foresthill General Plan, which was 28,000+ (for a Plan area approximately one-half the size).

Within the context of planned population growth in Placer County, population growth in the Plan area will not exceed regional population projections, and will not create substantial unplanned growth or concentration of people in the Plan area. As stated in the “Population” discussion above, Foresthill and other unincorporated areas will absorb a portion of the growth in Placer County, but geographical isolation, rugged terrain, and proactive community planning will slow growth to a rate that will not exceed buildout capacity. Based on impact evaluation criteria, this impact is considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.1-2 Development of the Plan area in accordance with the FDCP would promote an imbalance of jobs and housing in the Plan area.

The jobs/housing balance is an objective that promotes development that locates housing and employment opportunities in reasonable proximity to each other. Because economic and market factors, personal choice and other factors are involved, the effort is by nature imprecise.

As noted in Section 3.2.2 of this EIR (and the Land Use section of the FDCP), “The local economy must expand to provide employment opportunities for residents of the Foresthill Divide. The current jobs/housing imbalance will need to improve, and although most jobs will still be located off the Foresthill Divide in Auburn, South Placer County and the surrounding Sacramento metropolitan area, home-based businesses and telecommuting are expected to increase.”

The proposed FDCP represents an effort to improve the jobs/housing balance in the Plan area. The three Mixed-Use areas proposed to be created, totaling 153+ acres, combine residential, commercial and industrial uses on three sites. The development vision described for each Mixed-Use location in the FDCP attempts to achieve a balanced development pattern through the designation of an appropriate mix of residential, commercial, industrial, open space and other uses. The proposed FDCP also includes areas designated for conventional industrial and commercial uses. The new high school and elementary school will provide new employment opportunities within the Plan area. Employment projections show that retail and tourism-related employment will slowly but steadily increase in the Plan area. The Plan also assumes an increasing number of home-based businesses and residents who telecommute.

The Plan concentrates most new growth within existing communities and emphasizes infill development and creating a more complete, diverse, and balanced community. The Plan encourages the creation of primary wage-earner jobs and a variety of housing types. The Mixed-Use areas encourage residential and job-generating uses to be created within proximity to each other. Implementation of the proposed FDCP is anticipated to improve the jobs/housing imbalance that now exists within the Plan area. Based on impact evaluation criteria, this impact is considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.1-3 Development of the Plan area in accordance with the FDCP would not comply with the Housing Element of the Placer County General Plan and would not meet housing needs in the Plan area.

As stated in the “Housing” discussion above, the primary housing type in the Plan area is single family dwellings. This predominance is a reflection of demand, the rural character of the Plan area, and the lack of infrastructure (i.e., a community sewer system) that would support higher density residential development. Mobile homes (both in parks and on individual lots) represent a significant component of the affordable housing supply in the Plan area.

The proposed FDCP must be consistent with the Placer County General Plan, including the Housing Element. The County recently adopted an updated Housing Element, and relevant

policies and programs from that Housing Element are included in the FDCP. The FDCP includes additional goals, policies and implementation measures to promote the development of affordable housing, compliance with the regional housing need allocation, and housing rehabilitation and conservation. The proposed Mixed-Use areas provide for a variety of housing types.

The FDCP acknowledges that since the Plan area does not include a substantial amount of land available for higher density residential uses or the infrastructure necessary to provide affordable housing, it is anticipated that the Plan area will provide a minimal amount of affordable housing for the unincorporated area of Placer County. Areas which have the resources to provide affordable housing include Auburn/Bowman (adjacent to the Plan area), Tahoe City/Kings Beach, and new development areas designated in the 1994 PCGP. The Plan area will rely primarily on second residential units, mobile homes and higher density units that are constructed within the Mixed-Use areas. Any residential projects that meet the criteria adopted by the County for inclusionary affordable housing units will be required to comply with County policies and ordinances. Implementation of the proposed FDCP is anticipated to improve the supply of affordable housing within the Plan area, and must be in compliance with the Housing Element of the PCGP. Based on impact evaluation criteria, this impact is considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.2 LAND USE

3.2.1 INTRODUCTION

This section describes the existing and proposed land uses, agricultural resources, and relevant land use and open space policies for the FDCP and the Plan area. Pursuant to Section 15125(d) of the CEQA Guidelines, this section also provides a discussion of general plan consistency and describes the relationship between the proposed FDCP and the Placer County General Plan. The impacts of the proposed rezoning and new zoning classifications are also addressed. The impact assessment focuses on changes in land use, new land use districts, land use compatibility, impacts on agricultural lands and open space, and zoning and general plan consistency.

3.2.2 SETTING

PURPOSE

The Land Use section of the FDCP identifies and provides definitions for the land use designations applied within the Foresthill Divide Community Plan area. This section also includes the goals and policies, which prescribe how these land use designations are applied, types of development that are encouraged or discouraged, and related development policies. It is consistent with all other sections of the FDCP. The extent of the various designations used, and the densities permitted within those areas, are also based in part on the policies contained in other sections of the FDCP. Other sections are in turn directly affected by the Land Use section.

As an example, the circulation system improvements are based on the land use densities, building intensities, and types and locations of development allowed by the Land Use section.

The Land Use section is also presented in map form, as the Land Use Diagram, Figure III-1 of the Foresthill Divide Community Plan (Figure 2-4 of this EIR).

The Land Use section also includes background information and policies that address economic development in the FDCP area. The various non-residential land use designations in the Plan area are designed to attract and retain economic development that is appropriate in type and scale to the Plan area.

The Land Use section is one of the seven mandatory General Plan elements. All of the topics required to be addressed in a land use element by State law are covered in the Placer County General Plan. The purpose of the Land Use section in the Foresthill Divide Community Plan is to address topics specific to the Plan area, which are unique or are of particular interest to residents of the Divide.

The Plan area is a large ridge located within the American River Watershed that supports numerous small, rural communities. These communities include establishments that are remnants of the Gold Rush era, and are of unique historical and cultural value. As the communities have continued to grow, new developments have been introduced. While the Plan area remains predominantly rural in character, along with other unincorporated areas of the county, the Foresthill Divide has absorbed some of the growth in Placer County. This has resulted in the subdivision of land, and the introduction of modern patterns of development characterized by large-lot residential development, development that has occurred away from the core of the community, and automobile-oriented development. Development of the Plan area has also resulted in opportunities for re-use of existing structures and sites. The FDCP has taken into consideration, and promotes coordination with, plans for State and Federal lands included within the Plan area boundaries.

Employment projections provided by outside agencies may not accurately reflect actual conditions in the Foresthill Divide. The local economy must expand to provide employment opportunities for residents of the Foresthill Divide. The current jobs/housing imbalance will need to improve, and although most jobs will still be located off the Foresthill Divide in Auburn, south Placer County and the surrounding Sacramento metropolitan area, home-based businesses and telecommuting are expected to increase. Forestry is, and will continue to be, an important segment of the local economy. Recreation associated with the Tahoe National Forest, BLM lands, and the Auburn State Recreation Area will become an increasingly important industry in the Plan area.

GENERAL CONCEPTS/DESCRIPTION

As the FDCP Team was developing the Community Plan, it became apparent that new approaches to traditional planning issues were necessary. The Foresthill Divide is unique in many ways, and is not suited to standard land use planning techniques. As an example, to provide a resident population in the downtown area, the Plan provides for Mixed-Use Areas that

allows for many different activities to occur within those areas. Retail commercial uses, offices, public service buildings, and other traditional downtown businesses will be mixed with single-family and multi-family residential uses (perhaps even within the same building) in the Historic Downtown Mixed-Use Area. A downtown resident population will be the catalyst for more community events, and help create a pedestrian-friendly neighborhood reminiscent of the historic era represented by the architectural styles of the existing buildings in that area.

Another location on the Divide that has received special consideration is the old mill site at the west end of the historic downtown district. More than half of the old mill site will be utilized for the new high school, a new elementary school and a forest education facility. The Mill Site Mixed-Use Area immediately adjacent to the school site will house job-generating businesses. This site will require careful planning to accommodate all of these existing and proposed new uses.

The Canyon Mixed-Use Area extends from the Foresthill Road/Mosquito Ridge Road “Y” west to the medical building on the south side of Foresthill Road from the church west to the Starlite Café on the north side of Foresthill Road. This district will provide for retail commercial, tourist commercial, single and multi-family residential, and other uses while taking advantage of the phenomenal view of the Sierra Nevada to the east.

These mixed-use districts are one way to accomplish one of the primary goals of the FDCP: that higher residential densities should be located near the core of the community (defined as the area that extends from Foresthill Elementary School westerly to Foresthill Divide Middle School). The Plan also concentrates higher residential densities east of the historic downtown district to provide local traffic circulation throughout the “downtown” area.

The Pomfret Estate property (also known as “Forest Ranch”) is addressed in the FDCP by providing design flexibility for the residential density that already exists on the property (approximately 500 dwelling units). The majority of the property is assigned a Forestry designation (with a minimum lot size of 160 acres and no residential uses allowed) when the Timberland Production Zone (TPZ) designation expires in 2003. The FDCP assigns residential uses on that portion of the property which is located in close proximity to the downtown core area, while the more remote areas of the property are permanently dedicated to timber production and/or open space uses. Development of the property will require approval of a Specific Plan (a planning tool that requires very careful analysis and detailed implementation of the development plan proposed by the property owner). Development standards for this property are included as Appendix B of the FDCP.

Holding Capacity

Based on assigned land use designations, the FDCP’s estimated maximum population holding capacity is 13,500± persons, and its maximum number of dwelling units is 5,415±. In comparison, the 1981 Foresthill General Plan’s estimated maximum population holding capacity was 28,000±. Residential densities have been decreased by more than half under the FDCP. The new improvements to Foresthill Road can serve a total population of approximately 12,000 without resulting in unacceptable traffic congestion. Other public utilities and services have

similar limitations (as an example, there is no community sewer system to provide wastewater disposal for high density development). Development in accordance with the FDCP is designed to be sustainable, operating under the limits and constraints of these public facilities that serve all residents as well as people visiting the Plan area for business, tourism and recreational purposes.

Existing Land Use Patterns and Zoning Designations

The majority of the Plan area is forested and/or part of the steeply sloping topography that slopes to the Middle and North Forks of the American River. Development is primarily concentrated in areas where it can be sustained, including Foresthill, the Todd's Valley Subdivision, Baker Ranch, Michigan Bluff, and Yankee Jim's areas.

The Plan area includes area within the 1981 Foresthill General Plan, the 1994 Placer County General Plan, and the 1981 Weimar/Clipper Gap/Applegate General Plan. The large northeast portion of the Plan area consists of U.S. Forest Service Timberlands. Forestry uses with 20 to 160 acre minimum lot size requirements are located west of these Timberlands, and surround the Foresthill townsite. The North Fork and Middle Fork of the American River form the northern and southern periphery of the Plan area. The westernmost portion of the Plan area consists of low density residential and rural residential uses, public land owned by the Bureau of Land Management (BLM), and lands within the Auburn State Recreation Area operated by the Bureau of Reclamation.

Land use within the Foresthill townsite consists of commercial uses, industrial uses, and scattered public uses along the Foresthill Road corridor. Medium and low density and rural residential uses are an integral part of the townsite as well. Timberland Production Zones exist immediately southwest of the townsite.

Changes Since 1981 Plan Adoption

Since the adoption of the 1981 Foresthill General Plan, there have been several changes to the affected area. The Plan area has been enlarged from a 56 square mile Plan area to an approximately 109 square mile Plan area. The current Plan area encompasses more of the Foresthill Divide, and more accurately represents a fairly cohesive, yet spread-out, geographical community.

Construction of the Sugar Pine Reservoir Dam has been completed, and Sugar Pine Reservoir now provides drinking water to the majority of residents within the Plan area. The reservoir is currently owned by the U.S. Bureau of Reclamation (BOR) and operated by the Foresthill Public Utility District (Foresthill PUD). The District is in the process of purchasing the facilities from the BOR.

The solid waste disposal site in Foresthill, operated by the Bureau of Reclamation, has closed since the adoption of the 1981 General Plan. The site is currently being used as a transfer station, from which waste is transferred to the County's Western Regional Landfill near Roseville.

Forest Resources/Agriculture

The United States Forest Service (USFS) is currently undertaking the Sierra Nevada Forest Plan Amendment. The Draft Environmental Impact Statement (EIS) for the Forest Plan Amendment presents eight different alternatives for stewardship of national forests in the Sierra Nevada and Modoc Plateau. These alternatives are intended to sustain desired conditions of old forest ecosystems; protect and restore aquatic, riparian, and meadow ecosystems; improve fire and fuels management; combat noxious weeds; and sustain desired conditions of lower Westside hardwood ecosystems in the affected national forests.

The USFS proposes to establish management direction for National Forest lands on Sierran and Modoc Plateau forests, including the Tahoe National Forest, portions of which fall within the Foresthill Divide Community Plan area. All of the alternatives under consideration would maintain and enhance old forest conditions across Sierra Nevada landscapes. However, they would have different effects on potential losses of old forests to severe wildfires, amounts and distribution of old forest conditions, and old forest ecosystem functions and processes, including the uncertain effects of management activities on old forests. Under any of the alternatives, old growth trees will be protected; timber harvest levels would also be substantially reduced under any of the preferred alternatives.

Management direction established by the Record of Decision (ROD) for the Forest Plan Amendment Final EIS will amend direction in existing National Forest land and Resource Management Plans (forest plans), including the forest plan for the Tahoe National Forest.

Ownership Patterns

The Plan area falls under multiple jurisdictions, including Federal, State, County, and private lands. Federal lands are managed by the United States Forest Service (USFS), Bureau of Land Management (BLM), and Bureau of Reclamation (BOR), and are generally concentrated in the north and eastern portion of the Plan area, as shown in Figure III-1. Some scattered inholdings are located near the community of Foresthill. The westernmost portion of the Plan area also includes some BLM lands. USFS and BLM lands are used primarily for timber production and recreation.

The BOR owns the Sugar Pine Reservoir and dam; however, the facility and surrounding area are managed by the USFS, and the water distribution system is managed by the Foresthill PUD. State-managed federal lands within the Plan area include the Auburn State Recreation Area (SRA) in the far western portion of the Plan area, at the confluence of the North and Middle Fork American River. The SRA is comprised of 35,000 acres along both forks of the American River.

Non-federally and state-owned lands on the Foresthill Divide are within the unincorporated area of Placer County. Remaining lands fall under private ownership and are concentrated in the Foresthill, Todd's Valley, Baker Ranch, Michigan Bluff, and Yankee Jim's areas.

Land Use Assumptions

The following land use assumptions formulated by the Foresthill Divide Community Plan Team form the basis for the goals and policies and land use designations of the Community Plan:

1. Higher density development should be closer to downtown
2. Provide for a range of density (low-high)
3. Mixed use development (commercial with residential) in the “Core” area (school to school)
4. Commercial will be limited to the “Core” area (school to school) – limit development on existing commercial outside of the “Core”
5. Outside of the “Core”, a scenic buffer will be maintained along Foresthill Road and other major routes
6. Population @ buildout: 13,500±
7. Transfer of Development Rights (TDR) – provide opportunities to transfer development potential from constrained parcels with existing residential zoning to properties more suitable for development
8. Private forest holdings and agricultural interests will continue to exist with protection from development pressure and adjacent development activities
9. Protect and increase access to trails and staging areas
10. Infrastructure operations and maintenance will keep pace with development
11. Public lands will be given an open-space designation
12. Densities shall be directly related to road system capacity

DESCRIPTION OF LAND USE DISTRICTS

Land use designations have been applied to properties within the Plan area in accordance with the goals and policies of the Land Use section (which are presented below), as shown on the Land Use Diagram (Figure III-1 of the FDCP, Figure 2-4 of this EIR). The Land Use Diagram of the FDCP uses 12 land use designations to depict the types of land uses that will be allowed in different geographic locations of the Plan area. Definitions of each land use designation are included in the FDCP, expressed both in terms of allowed uses and the general geographic location and extent where each land use designation is applied. Each land use designation prescribes a precise parcel size, rather than a range of parcel sizes. The lot size established by

the land use designation is believed to reflect the appropriate maximum density for each area. The FDCP incorporates the following land use districts:

- Agriculture (Ag)/Timberland (T) (20, 40, 80, 160 acre minimum)
- Public Ownership (P)
- Rural Residential (RR) (2, 3, 4, 6, 10 acre minimum)
- Low Density Residential (LDR) (1 acre minimum)
- Medium Density Residential (MDR) (8 dwelling units/acre, 6 du/acre, 4 du/acre)
- Industrial (I)
- Development Reserve (DR)
- Forestry (FOR) (160 acres minimum)
- Mixed-Use Areas
 - Historic Downtown Mixed-Use Area
 - Mill Site Mixed-Use Area
 - Canyon Mixed-Use Area
- Historic Outlying Commercial Area (C)
(Monte Verde Inn, Everybody's Inn, Baker Ranch)

DESCRIPTION OF PROPOSED ZONING

The Community Plan is the policy framework and plan of action for the FDCP area, and the zoning regulations are a major tool to implement the Plan. The County can guide and control development within the Plan area through enforcement of Zoning Ordinance provisions such as minimum lot sizes, building setbacks, design guidelines, and implementation of the mixed use districts. Precise zone district designations are included as part of the Community Plan adoption process, and are critical to the future development of the Plan area. While the Community Plan land use designations provide a general description of the types of uses allowed in each area, the implementing zone district specifies a minimum lot size, a more precise definition of allowed uses, and standards for development. The proposed zoning is shown on Figure 2-6 of this EIR.

Table 3.2-1 is a matrix that presents the various zone districts that are considered to be compatible with the FDCP land use designations, and that will be applied to properties with those land use designations upon adoption of the Community Plan.

Table 3.2-1
Zoning Compatibility Matrix

Land Use Designation	Compatible Zone District(s) ¹
Medium Density Residential (8 dwelling units/acre)	RM-DL8
Medium Density Residential (6 dwelling units/acre)	RM-DL6
Medium Density Residential (4 dwelling units/acre)	RM-DL4

Land Use Designation	Compatible Zone District(s)¹
Low Density Residential (1 dwelling unit/acre)	RF-B-43 RF-B-X 1 Ac. Min.
Rural Residential (1 dwelling unit/2.3 acres)	RF RF-B-100
Rural Residential (1 dwelling unit/4.6 acres)	RF-B-X 4.6 Ac. Min. RF-B-X 5 Ac. Min.
Rural Residential (1 dwelling unit/10 acres)	RF-B-X 10 Ac. Min.
Ag/Timberland (1 dwelling unit/20 acres)	F-UP RF-SP-B-X 20 Ac. Min. RF-B-X 20 AC. Min.
Ag/Timberland (1 dwelling unit/40 acres)	F-UP RF-B-X 40 Ac. Min.
Ag/Timberland (1 dwelling unit/80 acres)	F-UP RF-B-X 80 Ac. Min.
Ag/Timberland (1 dwelling unit/160 acres)	F-UP TPZ TPZ-DR RF-MR-B-X 160 Ac. Min. RF-B-X 160 Ac. Min.
Canyon Mixed Use	C2-Dc/RS-Dc
Downtown Mixed Use	C1-Dh/RS-Dh
Mill Site Mixed Use	INP-Dc
Development Reserve	TPZ-DR
Public	O F-4.6 Ac. Min. TPZ
Forestry	TPZ
Industrial	IN-Dc IN-Dc-SP IN-UP-Dc
Commercial	OP-Dc C1-Dc C2-Dh

¹

Legend for Zone Districts:

Primary Zone Districts:

IN = Industrial

INP = Industrial Park

C1 = Neighborhood Commercial

C2 = General Commercial

F = Farm

FOR = Forestry

O = Open Space

OP = Office and Professional

RF = Residential Forest

RS = Residential Single-Family

- RM = Residential Multi-Family
TPZ = Timberland Production Zone
Combining Zone Districts:
-Dh = Design Historic
-Dc= Design Scenic Corridor
-UP = Conditional Use Permit
-B = Building Site (minimum lot size)
-B-X = As shown on map
-Ag = Agricultural
-MR = Mineral Reserve
-SP = Special Purpose
-DL = Density Limitation
-DR = Development Reserve
-

The Placer County Zoning Ordinance includes the precise density and development standards, regulations, and process requirements which will assure that eventual buildout of the FDCP area is consistent with the policies of the Community Plan. Other Placer County land use ordinances and regulations that will contribute to the Plan's implementation include: the Subdivision Ordinance, the Grading Ordinance, the Environmental Review Ordinance, the Development Agreement Ordinance, the Flood Damage Prevention Ordinance, the Uniform Building Code, Surface Mining and Reclamation regulations, and numerous other rules adopted to protect public health and safety and promote the general welfare of the residents of Placer County.

The Community Development Element of the FDCP includes the Foresthill Community Design Guidelines. Application of these guidelines to new development and renovation of existing development will assure that the appearance of the Plan area is consistent with the Vision Statement and policy guidance provided in the Community Plan.

ECONOMIC PROFILE

The majority of residents within the Plan area work off of the Foresthill Divide, and it is assumed that they will continue to do so throughout the 20-year planning horizon of this Plan. This type of activity has several effects. It provides residents with a steady income to sustain current lifestyles and rural character of the Divide, while providing competitive wages. It encourages economic development of the outside communities in which residents work, rather than economic development of the Foresthill Divide. It maintains the "bedroom community" phenomenon in Foresthill and reinforces the jobs-housing imbalance. It perpetuates automobile reliance and exposure to personal risk and the environmental risks associated with auto usage.

Although most residents of the Plan area work off the Foresthill Divide, employment on the Divide continues to increase. Education and Forest Service-related jobs provide employment through the government sector. Retail, office, manufacturing, and medical-related jobs provide the majority of employment through the private sector. The Sacramento Area Council of Governments (SACOG) has prepared employment projections for Foresthill. While these projections are based on an area smaller than the Community Plan area, and consequently a smaller population, they are generally indicative of economic activity within the Plan area. The SACOG projections are provided in Table 3.2-2, and are based on a year 2000 population of 4,012.

Because accurate employment data for small, rural communities is difficult to obtain (only a specialized survey could yield more accurate information), this EIR uses various available sources of information. The Placer County Economic Development Department utilizes State Employment Development Department (EDD) employment information. The “Regional Analysis District” used by SACOG for Foresthill is smaller than the Community Plan area, but does include principal population and employment centers. Anecdotal information and the community survey conducted for the Plan reveal that Plan area employment includes home-based businesses and telecommuting, a trend which is expected to increase as technology improves and people relocate from more congested areas to places such as the Foresthill Divide.

Table 3.2-2 Employment Projections by Sector

Year	Total Employment	Retail	Office	Medical	Education	Manufacturing	Other
1990	122	47	38	3	11	6	17
1997	198	34	48	11	27	32	46
2000	234	35	50	11	60	32	46
2005	265	47	62	11	60	32	53
2010	312	59	81	12	60	32	68
2015	455	82	113	15	110	32	103
2020	612	127	212	20	113	32	108
2022	657	145	222	25	115	32	118

Source: SACOG

Forestry

Manufacturing of lumber and wood products is one of the leading industries in Placer County, accounting for 800 jobs in 1995. According to the California Employment Development Department (EDD) Labor Market Information, a 25 percent increase should be expected by the year 2002, to total 1,000 jobs. A total of 65.3 million board feet of lumber were produced from forests in Placer County in 1998, totaling 3.1 percent of the California lumber market and contributing \$209.8 million to the local economy. The majority of these jobs are located in the central and eastern portions of Placer County (including the Plan area), in close proximity to privately and federally owned timberlands. In addition, 75 percent of permanent Foresthill District U.S. Forest Service employees are residents of the Divide. This currently accounts for 27 jobs; an additional 25 to 30 seasonal jobs are available from May until the first snow.

Tourism

Due to the proximity to public lands, historic Gold Rush character, and outstanding recreation opportunities, the Foresthill Divide attracts recreationists and tourists who contribute to the local economy. While no information is available on tourism within the Plan area, it can be deciphered from Placer County labor market information that tourism makes a significant contribution to the local economy. According to EDD, hotels and lodging accounted for 800 jobs in Placer County in 1995. Estimates conclude that by 2002, 1,300 persons will be employed in this sector. The resulting 62.5 percent increase within a 7 year period demonstrates that tourism, as indicated by employment in the hotel and lodging sector, is a valid and growing

industry within Placer County. As Placer County continues to grow and urbanize, regions within the County that are of scenic and recreational value and provide relief from urbanized areas will experience a higher volume of use; these activities will directly benefit the local economy.

Retail

Based on a year 2000 population of 4,012, SACOG has determined that 35 of 234 (15 percent) jobs within Foresthill are related to retail sales. Retail jobs are down significantly from 1990, when they accounted for 38.5 percent of total employment. SACOG has projected that retail-related employment will begin to increase to 19 percent by 2010 and to 20 percent by 2020, as shown in Table 3.2-2.

Industry

According to employment projection information from SACOG, manufacturing contributed 6 jobs to the Foresthill economy in 1990. In 1997, an additional 26 jobs were added, to total 32. Industry is expected to continue to contribute a total of 32 jobs annually through the year 2022.

Other

As shown in Table 3.2-2, medical services, education, and offices also contribute jobs to the local Foresthill economy. The increasing population on the Foresthill Divide necessitates the expansion of medical services, and medical employment history as well as projections reflect this.

Similarly, education-related jobs will continue to increase as the population increases, more families move to the area, and the Foresthill Union School District grows. The new high school and elementary school, in combination with expansion of existing educational facilities, will contribute 50 new jobs to the Foresthill economy within the next 15 years.

According to the SACOG projections, office employment is expected to steadily increase from 50 jobs (21 percent) in 2000 to 212 jobs (35 percent) by 2020.

While mining is by no means a growing industry in Placer County, according to the EDD, it provides a steady economic base for 100 people in the county. There has been no change in the number of mining jobs, and no change is expected. An estimated 20 to 30 individuals on the Foresthill Divide are involved in mining operations.

Trends

The SACOG employment projections and EDD Labor Market Information indicate that all sectors of the economy will continue to grow and produce more jobs for residents of the Plan area. Throughout the 1990s, retail jobs fell from 38.5 percent of total employment to 15 percent of total employment in Foresthill. Projections show that retail-related employment will begin to steadily increase through the year 2022, presumably in connection with increased recreation on the Foresthill Divide. Tourism is also directly connected to this increase. As in the past, retail

and office jobs will continue to provide the majority of employment opportunities on the Foresthill Divide.

While employment opportunities continue to increase on the Foresthill Divide, it should be understood that the majority of employed residents will continue to work off of the Divide. Most residents will find work in Auburn, south Placer County and the surrounding Sacramento metropolitan area, thus contributing to the “retirement and bedroom community” effect within the Plan area. This trend is expected to be offset to some degree by home-based businesses and telecommuting.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to land use and economic development:

General Land Use

Goal 3.B.1. Promote the wise, efficient, and environmentally sensitive use of land on the Foresthill Divide to help meet the present and future needs of residents and businesses.

Policies

- 3.B.1-1 The County shall promote the efficient use of land and natural resources.
- 3.B.1-2 The FDCP shall identify where development will be accommodated and where public infrastructure and services will be provided. This pattern shall promote the maintenance of the distinctive characteristics that make up the Foresthill Divide.
- 3.B.1-3 Infrastructure operations, services and maintenance shall keep pace with development.
- 3.B.1-4 Provide land use designations which protect existing land uses and discourage leapfrog development.
- 3.B.1-5 The County shall consider land use alternatives separately from land ownership and land tenure.
- 3.B.1-6 The County should not support requests to decrease the land use densities established by this Plan below that established by the precise zoning adopted concurrently with this Plan.
- 3.B.1-7 Higher density development should be located closer to the downtown area.
- 3.B.1-8 Provide for a range of densities (low to high) within the Plan area.
- 3.B.1-9 The County shall permit only low-intensity forms of development in areas with sensitive environmental resources or where natural or human-caused hazards are likely to pose a significant threat to health, safety, or property.
- 3.B.1-10 Establish guidelines for development of the Pomfret Estate (Forest Ranch) property.

Goal 3.B.2. Maintain the rural mountain character and natural resources of the Foresthill Divide.

Policies

- 3.B.2-1 Maintain and preserve the historic and rural forested character and natural resources of the Foresthill Divide.

- 3.B.2-2 The County shall encourage the retention of natural features as buffers between different, potentially incompatible uses as well as serving to preserve the rural mountain character of the area.

Residential Land Use

Goal 3.B.3. Provide residential development which is compatible with existing land uses, complements the rural surroundings, reflects the character and diversity of existing residential land uses, provides trails and open space, and promotes a sense of community.

Policies

- 3.B.3-1 Residential development shall be designed so as to maintain and preserve the historic and rural forested character and natural resources of the Foresthill Divide.
- 3.B.3-2 The County shall encourage the planning and design of new residential subdivisions to emulate the best characteristics (e.g., form, scale, and general character) of existing, nearby neighborhoods.
- 3.B.3-3 The County shall require that significant natural, open space and cultural resources be identified in advance of development and incorporated into site-specific development project design.
- 3.B.3-4 The County shall ensure that residential development retains natural features as buffers to separate different, potentially incompatible land uses such as agricultural operations, landfills, quarries and treatment plants.
- 3.B.3-5 The County shall not approve the development of isolated, remote, gated and/or walled residential projects.
- 3.B.3-6 In the preparation of subdivision design, natural features, noise exposures to residents, visibility of structures, circulation, access, maintenance of rural quality, and the relationship of the project to surrounding land uses shall be considered. Appropriate subdivision densities or total numbers of lots will be determined by these and other factors. In some instances, the maximum number of lots indicated by the land use designation or zoning on a given parcel of land may not be realized once these factors are considered.
- 3.B.3-7 The County shall require that all residential development provide private and/or public open spaces.
- 3.B.3-8 The County shall require the development and maintenance of new public/community recreational facilities as new residential development occurs.
- 3.B.3-9 The County shall strive to maintain and/or improve the character of established residential areas.
- 3.B.3-10 Lots in subdivisions shall be of adequate size and appropriate shape for the range of primary and accessory uses for which the area is designated. Further, the subdivision shall not:
- Create the need for variances to ordinance requirements such as setbacks, lot size minimums, height maximums, length-to-width ratios, etc.
 - Create abutting lots which have two front yards and no rear yard, unless special provisions consistent with these guidelines have been made to provide for sound attenuation.
 - Create flag lots within the subdivision.

Goal 3.B.4. Provide for the public dedication and construction of trails to become a part of the community trail system as lands develop.

Policies

- 3.B.4-1 The County shall require residential subdivisions to be designed to provide well-connected public internal and external street and multi-use trail systems.

Goal 3.B.5. Provide adequate land in a range of residential densities to accommodate the housing needs of all income groups expected to reside in Placer County.

Policies

- 3.B.5-1 The County shall encourage the development of multi-family housing in the Core Area.
- 3.B.5-2 The County shall promote the development of higher density residential areas near the Core Area and where infrastructure is available to support it.

Commercial Land Use

Goal 3.B.6. Designate adequate commercial land for and promote development of commercial uses to meet the present and future needs of Foresthill Divide residents and visitors and maintain economic vitality.

General Commercial Area Policies

- 3.B.6-1 The County shall require that additional commercial development be limited to the Core Area, the primary commercial area of the community. Those parcels historically designated for commercial use shall retain the commercial designation.
- 3.B.6-2 The County shall require that new commercial development be designed to encourage and facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed primarily to serve vehicular circulation.
- 3.B.6-3 The County shall require new commercial development to be designed to minimize the visual impact of parking areas on public roadways.

Core Area Policies

- 3.B.6-4 The County shall encourage the Core Area to provide a variety of goods and services, both public and private.
- 3.B.6-5 The County shall require minimal, or in some cases, no building setbacks for commercial and office uses in the Core Area.
- 3.B.6-6 The County shall encourage parking in the Core Area to be consolidated in well-designed and landscaped *public* parking areas.
- 3.B.6-7 The County shall allow for both on-street and off-street parking to satisfy the parking requirements of the uses in the Core Area.
- 3.B.6-8 The County shall encourage the preservation of historic and attractive buildings in the Core Area, and encourage new development to enhance the character of the commercial district.
- 3.B.6-9 The County shall require that existing and new Core Area development be designed to integrate open spaces where possible, especially taking advantage of any natural amenities such as creeks, hillsides, and scenic views.
- 3.B.6-10 The County shall encourage the development of activity centers in the Core Area. New development of commercial, office, residential and/or institutional uses can assist in creating such a "town center."

The County can also assist by ensuring that appropriate land use designations and zone districts are available and by ensuring that appropriate infrastructure and services are available. The "town center" should be located in the central town area and could include such features as a small park or village green, a community center, a new post office, new commercial or office uses, and other essential services to be used by the residents and visitors of the Plan area.

Historic Outlying Commercial Districts

Goal 3.B.7. **Concentrate and limit the size and configuration of the existing commercial zoning in the Historic Outlying Commercial Districts outside the Core Area in order to prevent strip zoning in these areas, preserve the integrity of the commercial uses within the Core Area and recognize these areas as the historic commercial areas on the Divide.**

Policies

3.B.7-1 The County shall not permit the expansion of the commercial uses beyond the boundaries of the Historic Outlying Commercial Districts.

Mixed-Use Areas

Goal 3.B.8. **Establish a Mixed-Use zone district in the Core Area that allows for a mix of residential, commercial, professional office and industrial uses that are designed to maintain the character of the Core Area.**

General Mixed-Use Area Policies

- 3.B.8-1 The County shall allow for mixed uses such as ground floor commercial and second floor residential to be developed in the Mixed-Use zone district.
- 3.B.8-2 The County shall discourage the development of high traffic generating uses (e.g., drive-through banks, fast food restaurants) in the Mixed-Use zone district.

Historic Mixed-Use Area Policies

- 3.B.8-3 Properties in the historic core area, which front on either Foresthill Road or Main Street, shall be zoned to allow mixed land uses (i.e., single family residential, multifamily residential, office, retail commercial, restaurants, etc. Industrial uses are not proposed to be included).
- 3.B.8-4 The County shall designate specific areas suitable for industrial development and reserve such lands in a range of parcel sizes to accommodate a variety of residential, commercial and professional office uses.
- 3.B.8-5 The County shall encourage the existing downtown area to provide a variety of goods and services, both public and private.
- 3.B.8-6 The County shall encourage parking in the downtown area to be consolidated in well-designed and landscaped areas.
- 3.B.8-7 The County shall encourage the preservation of historic and attractive buildings in the downtown area, and encourage new development to enhance the character of the commercial district.
- 3.B.8-8 The County shall allow for setbacks to be established at the Foresthill Road/Main Street right-of-way as long as allowances are made for pedestrian circulation. These setbacks shall reflect the character of the block or of the adjacent buildings on the block.

Mill Mixed-Use Area Policies

- 3.B.8-9 The County shall set aside this area for light industrial uses and uses that are accessory to these light industrial uses. Retail uses shall not be permitted in the Mill Mixed-Use area.
- 3.B.8-10 The County shall encourage parking in the Mill Mixed-Use area to be consolidated in well-designed landscaped areas. A 10-foot wide landscape strip shall be established along access roadways in this area and a pedestrian/circulation plan developed to increase accessibility between the use sites in the area. This plan shall include a consideration of interconnected parking areas and trails.
- 3.B.8-11 The County shall not allow outdoor storage in the Mill Mixed-Use area unless this storage is accessory to a permitted use. Solid screening of permitted outdoor storage areas shall be installed.

Canyon Mixed-Use Area Policies

- 3.B.8-12 The County shall set aside this area for single and multifamily residential, tourist accommodation, light commercial and professional office uses and uses that are accessory to these uses.
- 3.B.8-13 The County shall ensure that new development in the Canyon Mixed-Use area be designed so that no contiguous parking lot is created along the Foresthill Road frontage. Parking along the sides or to the rear of new development in this area and the utilization of shared driveways between uses in this area shall be encouraged.
- 3.B.8-14 The County shall require that all new development in the Canyon Mixed-Use area be designed so that viewsheds are protected.

Industrial Land Use

- Goal 3.B.9. To designate adequate land for and promote development of industrial uses to meet the present and future needs of residents of the Foresthill Divide for jobs and to maintain economic vitality.**

Policies

- 3.B.9-1 The County shall only approve new industrial development that has the following characteristics:
- a. Adequate infrastructure and services;
 - b. Convenient connections to the regional transportation network;
 - c. Sufficient buffering from residential areas to avoid impacts associated with noise, odors and the potential release of hazardous materials;
 - d. Minimal significant adverse environmental impacts; and
 - e. Minimal adverse effects on scenic routes, recreation areas, and public vistas.
- 3.B.9-2 The County shall designate specific areas suitable for industrial development and reserve such lands in a range of parcel sizes to accommodate a variety of industrial uses.

- Goal 3.B.10. To promote the wise, efficient, and environmentally-sensitive use of the industrially-zoned land use districts to meet the present and future needs of the Foresthill Divide.**

Policies

- 3.B.10-1 Protect the industrially-zoned areas from encroachment by incompatible uses.
- 3.B.10-2 Encourage industries which are compatible with the established industrial firms in the area.

- 3.B.10-3 Maintain strong design review standards to ensure attractive industrial development, especially along the Foresthill Road corridor.
- 3.B.10-4 Develop a land use diagram which recognizes known constraints in public services, transportation facilities and environmental conditions.
- 3.B.10-5 Encourage the development of a diverse and compatible range of employee-generating uses.
- 3.B.10-6 Provide a diversity of industrial uses in order to ensure a diverse economy. Industrial use types include, but are not limited to:
- a. Warehousing, storage, production, manufacturing and assembly
 - b. Incubator or small-scale industries
 - c. Campus-type industrial parks, including research and development facilities
 - d. Offices, business support services and restaurants
- 3.B.10-7 The County shall ensure that proposed land uses are compatible with existing or planned adjacent uses, including established industrial firms on the Foresthill Divide.
- 3.B.10-8 The County shall seek to protect the industrial, commercial and professional land uses on the Foresthill Divide from encroachment by incompatible uses.
- 3.B.10-9 Heavy industry or land-extensive industrial uses should be spatially separated from other urban uses.
- 3.B.10-10 Structures associated with business park uses shall incorporate high quality architectural design elements consistent with the standards contained in the Placer County Design Guidelines Manual and the Foresthill Community Design Guidelines.
- 3.B.10-11 Due to the potential for industrial properties to be developed adjacent to residential land uses, such uses should be designed, where possible, to generate minimal impacts on these areas. Measures to reduce potential conflicts include, but are not limited to, the following:
- a. Noise attenuation;
 - b. Reduction or shielding of lighting near residential areas;
 - c. Using site design to place the least impactive activities or uses nearest the residential areas;
 - d. Architectural and landscape screening of facilities and activities; and
 - e. Large structural setbacks.
- 3.B.10-12 The County shall encourage the establishment of business park uses which are employee-intensive and which provide a significant number of primary-wage earner jobs which provide salaries comparable to the County's median income level or higher.
- 3.B.10-13 Commercial uses associated with business park properties shall provide goods and services for employers and employees of businesses within the business park and other surrounding industrially designated properties.

3.2.3 IMPACT EVALUATION CRITERIA

Appendix G of the CEQA Guidelines provides three criteria for judging potentially significant impacts that are related to land use and planning:

- Would the project physically divide an established community?
- Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

With regard to agricultural resources, Appendix G provides the following three criteria for judging potentially significant impacts:

- Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?
- Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

In addition to the above, the following criterion will be used to judge the significance of impacts:

- Would the project result in the development of incompatible uses and/or the creation of land use conflicts?

3.2.4 IMPACTS AND MITIGATION MEASURES

3.2-1 Potential conflicts between the FDCP and the PCGP.

In 1994, the Placer County Board of Supervisors adopted the Placer County General Plan (PCGP), which establishes the overall framework for development of the unincorporated area of the county and protection of its natural and cultural resources. The FDCP provides a more detailed focus on a specific geographic area of the unincorporated county. Some of the goals, policies and implementation measures contained in the FDCP repeat those goals, policies and implementation measures contained in the PCGP which pertain to the Plan area. Other goals, policies and implementation measures in the FDCP go further to supplement and elaborate upon (but not supersede) those contained in the PCGP to address specific community concerns and issues. In some instances, the FDCP relies entirely on the PCGP to address certain issues which are not unique to the Plan area and which are more appropriately addressed in a broader sense in the PCGP. In particular, noise relies entirely on the PCGP (in terms of goals, policies and implementation measures), while the seismic safety and air quality sections rely on the PCGP for the broader issues, and also contain policies to address issues specific to the Plan area.

The FDCP is one of 22 Community Plans within the unincorporated area of Placer County. As stated in the PCGP, “[b]ecause of the diverse geography and land uses within the county...individual community plans have been prepared within the framework of the overall county plan to address the unique issues and concerns arising in the different unincorporated area.” The Plan area is approximately twice the size of the area encompassed by the 1981 Foresthill General Plan, and includes areas previously subject to the PCGP and the 1981 Weimar/Clipper Gap/Applegate General Plan.

As described above, the proposed FDCP does not conflict with the PCGP, and implements the policies of the PCGP. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.2-2 Development of incompatible uses and/or creation of land use conflicts within the FDCP area.

The proposed FDCP is designed to promote land use compatibility and avoid or mitigate the establishment of new incompatible land uses in proximity to one another. Policies which specifically address this issue include:

- 3.B.2-2 The County shall encourage the retention of natural features as buffers between different, potentially incompatible uses as well as serving to preserve the rural mountain character of the area.
- Goal 3.B.3 Provide residential development which is compatible with existing land uses, complements the rural surroundings, reflects the character and diversity of existing residential land uses, provides trails and open space, and promotes a sense of community.
- 3.B.3-4 The County shall ensure that residential development retains natural features as buffers to separate different, potentially incompatible land uses such as agricultural operations, landfills, quarries and treatment plants.
- 3.B.3-6 In the preparation of subdivision design, natural features, noise exposures to residents, visibility of structures, circulation, access, maintenance of rural quality, and the relationship of the project to surrounding land uses shall be considered. Appropriate subdivision densities or total numbers of lots will be determined by these and other factors. In some instances, the maximum number of lots indicated by the land use designation or zoning on a given parcel of land may not be realized once these factors are considered.
- 3.B.9-1 The County shall only approve new industrial development that has the following characteristics:
 - a. Adequate infrastructure and services;
 - b. Convenient connections to the regional transportation network;
 - c. Sufficient buffering from residential areas to avoid impacts associated with noise, odors and the potential release of hazardous materials;
 - d. Minimal significant adverse environmental impacts; and
 - e. Minimal adverse effects on scenic routes, recreation areas, and public vistas.
- 3.B.10-1 Protect the industrially-zoned areas from encroachment by incompatible uses.

- 3.B.10-2 Encourage industries which are compatible with the established industrial firms in the area.
- 3.B.10-7 The County shall ensure that proposed land uses are compatible with existing or planned adjacent uses, including established industrial firms on the Foresthill Divide.
- 3.B.10-8 The County shall seek to protect the industrial, commercial and professional land uses on the Foresthill Divide from encroachment by incompatible uses.
- 3.B.10-11 Due to the potential for industrial properties to be developed adjacent to residential land uses, such uses should be designed, where possible, to generate minimal impacts on these areas. Measures to reduce potential conflicts include, but are not limited to, the following:
- a. Noise attenuation;
 - b. Reduction or shielding of lighting near residential areas;
 - c. Using site design to place the least impactful activities or uses nearest the residential areas;
 - d. Architectural and landscape screening of facilities and activities; and
 - e. Large structural setbacks.

The “Industrial” land use designation for the FDCP is specifically tailored to reduce or avoid potential land use conflicts by limiting the types of industrial uses allowed in the Plan area. The proposed FDCP establishes three Mixed-Use areas: the Historic Downtown Mixed-Use Area, the Mill Site Mixed-Use Area, and the Canyon Mixed-Use Area. Although mixed-use areas can provide an opportunity for incompatible land uses to be established, a “development vision” for each area is described in the Plan which addresses land use compatibility issues and how each area should be developed. Implementation of the proposed FDCP is anticipated to reduce land use compatibility conflicts. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.2-3 Loss of open space resulting from development in accordance with the FDCP.

Development of the Plan area in accordance with the proposed FDCP would allow conversion of lands currently in undeveloped open space to residential, commercial, industrial or public uses. While the proposed FDCP will allow for less conversion of open space than the existing (1981) Foresthill General Plan, impacts must be measured in comparison to existing conditions rather than future planned uses.

The majority of the Plan area is designated for Public Ownership (53%), Agricultural/Timberland (23%) and Forestry (12.4%). The remaining lands (less than 12%) are designated for Rural Residential (parcel sizes ranging from 2.3 acres to 10 acres), Low and Medium Density Residential, Industrial, Development Reserve, Mixed-Use Areas and Historic Outlying Commercial Areas. Portions of these areas are already developed, and the policies of the FDCP are designed to discourage “leapfrog” development and concentrate development within or near the Core Area of Foresthill. Also, as described in Impacts 3.6-1 and 3.6-2 above, the FDCP includes policies to protect existing agricultural lands, forest and timber resources.

Nevertheless, the loss of open space resources through conversion to developed uses represents a *significant, unavoidable, cumulative impact* of the proposed FDCP.

Mitigation Measure

No mitigation measures are available to reduce this impact to a less than significant level. Therefore, this impact will remain *significant, unavoidable and cumulative*.

3.3 COMMUNITY DESIGN

3.3.1 INTRODUCTION

This section of the EIR provides a description of the existing visual characteristics of the FDCP. Relevant goals and policies from the Placer County General Plan, Placer County Design Guidelines Manual and Placer County Landscape Design Guidelines Manual are described and compared to the Foresthill Community Design Guidelines of the FDCP.

The purpose of this analysis is to determine the extent to which the FDCP will cause visual and aesthetic impacts. Mitigation measures are then identified that may be used to minimize identified impacts. General topics addressed include the conversion of specific areas of the Plan area from rural or undeveloped land to rural residential, suburban and mixed-use development patterns, increases in night lighting and light and glare as a result of development in and around the area, and compatibility of the FDCP with County programs that promote a high quality visual and aesthetic environment.

The Setting description and the Foresthill Community Design Guidelines were prepared by Mogavero Notestine Associates.

3.3.2 SETTING

PURPOSE

The Community Design section of the Foresthill Divide Community Plan encourages preservation of the unique features and characteristics which define the Foresthill Divide. This section must be considered in the context of the entire Community Plan. The Land Use, Population and Housing, Open Space, and Transportation/Circulation sections include policies which have an effect on community design.

ELEMENTS OF COMMUNITY DESIGN

Community design is about community building. It is broader in scope than the mere appearance of a building. It concerns the built character, order, and psyche of the area. It is the interrelationship of various components (buildings, transportation system, open space, vistas, interaction of humans between each other and the natural environment, heritage, and economics) that, when put together, make up a total community.

Good community design is building communities that are safe for children to walk to school or for the elderly to cross the street. It is how to maintain the downtown as a place where locals, as well as visitors, want to go. It respects the natural environment as well as economic gain. It creates places for people to feel comfortable with each other and with the built environment.

The Places

From a community design perspective, the Foresthill Divide Community Plan area can be categorized as having several types of places. They include the small rural community of Foresthill, the rural commercial areas of Baker Ranch, Everybody's Inn, Monte Verde, the existing rural residential areas of Todd's Valley and Michigan Bluff, potential future rural residential, scenic roadways, and forests and wildlands, as shown in Figure III-3 of the FDCP. Each of these places has its own unique character which should be preserved and enhanced.

Foresthill

The downtown or historic core area of Foresthill is generally bounded by the middle school on the west, the elementary school on the east, Harrison Street on the north, and Lowe Street on the south, as shown in Figure III-4 of the FDCP. The design character is a combination of a rural forested small town influenced by its history of gold mining and lumber mills. Victorian homes and commercial buildings are scattered throughout the area, with a concentration of historic commercial buildings near the Main/Foresthill and Soap Street intersection.

Many of the newer buildings reflect the historic and forest nature of the community. Some good examples include Robber's Roost, Foresthill Veterinary Clinic, and Pass Lab. Development opportunities in the downtown core are available through the infill of vacant sites, rehabilitation of existing commercial structures, or the conversion of historic homes to commercial use. In order to enhance the economic viability from recreationalists and tourists, it is important that new development and rehabilitation is of a high quality that respects the historic and cultural character of the community. If the downtown area is successful in attracting new commercial development, parking will continue to be a limiting factor. A good example of off-street parking design can be found in the Foresthill Veterinary Clinic's parking facility; the parking lot is oriented to the rear of the property, conforms to the terrain and is nicely landscaped.

Streetscape improvements are proposed for Main Street and Foresthill Road east of Gold Street. These improvements should utilize and build upon existing features, such as the mini-park next to the PUD office, the planters located west of Soap Street along Main Street, and the historic water troughs in the center area between Foresthill Road and Main Street. These improvements need to enhance pedestrian circulation, especially for children traveling to and from the elementary school. The improvements should also be designed to accommodate equestrians.

Leroy Botts Memorial Park is located just north of the downtown core. The park is home to the Memorial Hall, a chapel, and the Foresthill Divide Museum. The park is a major attraction for the community as well as visitors. One distraction to the pleasant environment that the park provides is the Placer County Water Agency building and corporation yard. This facility creates a division between various park functions, and architecturally intrudes on the rural ambience.

To the west of downtown is the former Georgia Pacific Mill site. Proposed reuse of the site includes plans for a new elementary school, a high school, an environmental education center, and a 50± acre industrial park. The site has views to the north of Devils Canyon and a forested perimeter to the north and west. A few old mill buildings remain on the site. One of those buildings has unique architectural style that could be emulated in future development. An important issue that must be addressed in the planning of the mill site is how students will safely access the schools as pedestrians, bicyclists, and motorists.

Another distinct area within the community of Foresthill is the west-end or “Canyon Mixed-Use area” west of the Y of Foresthill Road and Main Street to the middle school. Uses include Robber’s Roost, the Post Office, and Worton’s Market, among others. Many of the buildings attempt to convey a historic theme, but are not totally successful. An example is the building in which the Post Office and Placer Sierra Bank are located. It has a western theme front façade, with board-and-batten siding and a wooden canopy, but it is too monolithic; it needs to be broken up into smaller elements to appropriately express the historic building scale and character. On the south side of the road is a fairly sharp drop-off to the canyon that provides spectacular views. Old mill worker cottages are located south of Foresthill Road, across from the former Georgia Pacific Mill. These cottages could be restored and used as a combination of residential, lodging, office and boutique style retail, similar to the cottages in Graeagle located north of Truckee.

Natural locations for realizing that the visitor has arrived in Foresthill are the intersection of Foresthill Road and Race Track Street on the west, and the St. Joseph’s Catholic Church bell on the east. The community’s urban edge or boundaries, beyond which no additional development will occur, are the Auburn State Recreation Area and Tahoe National Forest, which limit development activities to the south, east and west. There is no such edge to the north. Commercial development is limited to the Foresthill Road corridor between Worton’s Foresthill Grocery on the west and the elementary school on the east.

Rural Commercial

There are three isolated rural commercial areas in the Foresthill Divide Community Plan area: Baker Ranch, Everybody’s Inn, and the Monte Verde Inn. Each has a unique character. The Monte Verde Inn is a converted homestead, now being used as a bed and breakfast. Everybody’s Inn is more of an old roadside bar and grill. Baker Ranch is a 1960s ranch style retail space and pub.

Rural Residential

There are essentially two rural residential developments outside of the community of Foresthill: Todd’s Valley and Michigan Bluff. Todd’s Valley is laid out like a traditional suburban subdivision on one-acre lots with curvilinear streets and cul-de-sacs. The homes are mostly built in the ranch style of architecture. A nice feature of Todd’s Valley is that very few of the homes can be seen from Foresthill Road. Michigan Bluff, on the other hand, is a very small historic community with historic Gold Rush and farmhouse types of structures.

A potential development site of 580± acres located just north of the community of Foresthill is zoned for one acre lots (RF-B-40, PD 1.0 Zoning). A Specific Plan could be prepared that incorporates the historic character of the community into the design, and integrates the vehicular, bicycle and pedestrian circulation system into the existing community to the greatest extent possible.

Scenic Roadways

The community has identified the following road segments as scenic roadways: Foresthill Road in the Plan area to Robinson Flat; Mosquito Ridge Road to Robinson Flat Road; and Robinson Flat Road from Mosquito Ridge Road to Foresthill Road. These roads show off some of the area's scenic resources, including its forests and vistas. They are important features in the community, especially in their ability to help attract and maintain a visitor population.

Forest Backdrop

As noted in Planning For Prosperity, a policy document prepared by the Sierra Business Council (1998):

Agricultural and forestlands are critical to the economic health of the Sierra Nevada, not solely or even primarily for the value of the products and jobs they generate directly, but also for the essential contribution they make to the region's economy as scenic assets. The Sierra Nevada's agricultural lands and forests contribute significantly to the economic wellbeing of our region by drawing new businesses and wealth to our towns and communities, increasing private property values throughout the region, and supporting our tourist economy. Agriculture and forestlands also play a critical role in sustaining healthy natural systems by providing plant and wildlife habitat, migration corridors, watershed protection, and other benefits.

These lands in the Foresthill Divide Community Plan area provide the community with an aesthetic value, as well as an economic benefit.

Scenic Districts and Corridors

The entire segment of Foresthill Road within the Plan area is designated in the Placer County Scenic Highways System. Because of the special scenic qualities of certain portions of the Plan area, including Foresthill Divide Road (which starts at Baker Ranch), those roads traversing these areas are recommended to be protected by special ordinances to enhance scenic viewsheds.

Night Lighting and Signage

The primary sources of light in the Plan area include headlights on the roadway system, particularly Foresthill Road, commercial development, and industrial facilities. Strong sources of light and glare can create a significant nuisance effect on sensitive receptors. Rural residents, who seek the quiet and relative seclusion of the foothill and mountain communities, and who

value the historical ambience of the Placer County gold country, are particularly sensitive to the effects of strong light sources. A lighting district has been established in Foresthill, which is limited to the Downtown Historic Area.

The nuisance effect must be weighed against the beneficial, often essential uses of such lighting. These beneficial uses include nighttime security for commercial and industrial locations and certain residential districts; lighting of work areas at facilities that may operate during nighttime hours; and street lighting at key intersections. Notwithstanding the fact that these uses of lighting are beneficial, the unwanted effects on surrounding uses can and should be mitigated through Community Plan policies and standards and, if necessary, Environmental Impact Report (EIR) mitigation measures.

The Placer County Rural Design Guidelines provide one goal regarding lighting that encourages the minimization of artificial lighting on residences, other structures, and along roadways to limit the amount of light pollution. The Guidelines discuss the role of light pollution in rural communities and conclude that even streetlights are not desirable in a rural community. “In the evening, the rural feeling is created by the absence of outdoor lights which allows for the enjoyment of the night sky without interference”. The Guidelines recommend techniques designed to minimize light pollution.

Signage can also disrupt the rural experience. However, sensitivity to the rural character should be balanced with signage that will still serve its purpose: to communicate information about the businesses in the area, and the nature and quality of the physical environment. The Placer County Design Guidelines Manual states: “Well-designed signs contribute to the character of a building’s façade while enlivening the streetscape, in addition to communicating information about goods and services of individual businesses”.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to community design:

Goal 3.C.1. Promote, preserve and enhance the forested nature of the Foresthill Divide and rural atmosphere of the Foresthill community by requiring high aesthetic quality in all new development.

Policies

- 3.C.1-1 All new development (including major remodeling and reconstruction) shall be designed in compliance with applicable provisions of the Foresthill Community Design Guidelines, Placer County Rural Design Guidelines and Placer County Design Guidelines Manual.
- 3.C.1-2 Future development proposals shall be submitted to the Foresthill Design Review Committee (Foresthill Forum) to ensure consistency with design standards and community concerns.
- 3.C.1-3 Design commercial, industrial and residential site layouts with the intent of encouraging human interaction, protecting the Divide’s natural resources and providing compatibility with the surrounding environment.
- 3.C.1-4 Design all new development to be compatible with the scale and character of the area. Structures, especially those outside of commercial centers, should be designed and located so that:

- a. They do not silhouette against the sky above ridgelines or hilltops;
 - b. Roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline;
 - c. They fit the natural terrain, and;
 - d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).
- 3.C.1-5 The size and scale of all new buildings shall be conducive to maintaining the rural atmosphere of the Foresthill area. The architectural scale of non-residential buildings, as differentiated from size, shall reflect that of the immediate surroundings.
- 3.C.1-6 Provide a pleasant environment as well as safety and shelter to pedestrians.
- 3.C.1-7 New rural and suburban development shall be designed to preserve and maintain the rural mountain character and quality of the area.
- 3.C.1-8 Maintain the historic rural/mountain character of the historic core areas of Foresthill and Michigan Bluff.
- 3.C.1-9 The aesthetic appearance of the open areas, particularly the entrances into the town, shall be improved.
- 3.C.1-10 All new development located at entrances to the community shall be designed to include elements such as signage, landscaping, and appropriate architectural detailing to help establish a distinct identity for Foresthill.
- 3.C.1-11 Protect and enhance the gateway and scenic corridors that bring residents and visitors onto the Foresthill Divide and into Foresthill.
- 3.C.1-12 New projects, outside the commercial core area of Foresthill, shall be required to provide a minimum 50 foot wide landscaped area adjacent to Foresthill Road, Foresthill - Soda Springs Road, and Mosquito Ridge Road, be preserved whenever possible. Existing trees within this landscape area should be saved, or if none exist, new trees shall be planted to fill in the gaps. The use of native evergreens and oaks shall be required. Low growing native ground covers shall be planted beneath these trees.
- 3.C.1-13 Restaurant and Retail Commercial structures, outside of the historic core area of Foresthill, should be located as near to the road right-of-way as is possible, allowing for landscaping and pedestrian circulation. Ideally parking with adequate maneuvering area would be behind or between structures.
- 3.C.1-14 Commercial structures, outside of the historic core area of Foresthill, should incorporate traditional elements and materials.
- 3.C.1-15 Wherever possible an all weather trail (e.g., decomposed granite), roughly parallel to but physically separate from Foresthill Road and Foresthill - Soda Springs Road, shall be provided for pedestrians and motorized traffic.
- 3.C.1-16 Outdoor storage, not related to a residential use, shall be screened from public view.
- Goal 3.C.2. Implement the Foresthill Community Design Guidelines, Streetscape Master Plan for Foresthill Road and Main Street within the historic core area of Foresthill.**

Policies

- 3.C.2-1 To provide adequate parking in the historic commercial area while respecting and preserving the traditional development patterns by retaining and expanding the existing on-street parking along and between Foresthill Road and Main Street, either as ninety degree or angled parking spaces. This has the added benefit of serving to calm and slow traffic on both streets.
- 3.C.2-2 On site parking should be located to the side or rear of new development. On site parking areas located between the street right of way and the front of the building shall be discouraged so that new development will be consistent with existing development.
- 3.C.2-3 The County shall limit night lighting visible from the exterior of a building and the project's boundaries to that necessary for security, safety, and identification. Night lighting shall also be screened from adjacent residential areas and not be directed in an upward manner or beyond the boundaries of the parcel on which the building is located.
- 3.C.2-4 The County shall preserve existing structures that are more than 50 years old, in the historic core areas of both Foresthill and Michigan Bluff where possible and practical.
- 3.C.2-5 Before the issuance of a demolition permit for any structures in the historic core areas of both Foresthill and Michigan Bluff, the Foresthill Forum (AKA Municipal Advisory Committee) shall review and comment on the proposed demolition.
- 3.C.2-6 New structures built in the historic core area of Foresthill shall incorporate traditional elements and materials, such as covered front porches, false fronts, tall narrow windows, solid wood or brick siding (or visual equivalent) into their design, consistent with the adopted "Historic Design Guidelines" applicable for use on the Foresthill Divide. Design elements such as window lines, roof heights, porch roofs, cornice widths, etc. from adjacent buildings should be carried over and reflected in the design of new structures in order to enhance the continuity and unity of the street.
- 3.C.2-7 The County shall assist the community in the adoption and implementation of Foresthill Community Design Guidelines tailored specifically to the unique needs of the Foresthill Divide.
- 3.C.2-8 Additions to existing structures in the historic core area of Foresthill shall be designed, and use materials to match, the existing building and shall be consistent with the adopted Foresthill Community Design Guidelines applicable for use on the Foresthill Divide.
- 3.C.2-9 When remodeling existing structures in the historic core area of Foresthill every effort shall be made to preserve and/or enhance the historic character of the structure, consistent with the adopted Foresthill Community Design Guidelines applicable for use on the Foresthill Divide.
- 3.C.2-10 New commercial structures built in the historic core area of Foresthill shall be located as close as possible to the front (street) property line.
- 3.C.2-11 Restore the street trees which historically graced the streets of the core area of Foresthill by providing tree wells / planter areas at regular intervals among the on street parking along Foresthill Road and Main Street. Several different species of trees, adapted to use as street trees, and which have canopies of similar size and shape shall be identified for use.
- 3.C.2-12 The historic water tanks located between Main Street and Foresthill Road shall be restored to their original appearance, with or without water as is deemed appropriate from a maintenance perspective.
- 3.C.2-13 The County shall install brick or stamped concrete crosswalks at both ends of the historic core area of Foresthill, and at the intersections of Gold Street with both Foresthill Road and Main Street.

This texture change in the road surface will serve to both slow traffic and let travelers know that they have arrived.

- 3.C.2-14 A walkway shall be constructed along the north side of Foresthill Road and the south side of Main Street within the historic core area of Foresthill. This walkway shall connect to and be the same width as the surviving portions of the historic boardwalk (in front of the Odd Fellows Building and the Foresthill Lodge). The walkway should be constructed of a durable material such as brick or stamped concrete.

Goal 3.C.3. Ensure that development projects complement the rural nature of the Foresthill Divide by minimizing the visual impact of man made features on the rural landscape.

Policies

- 3.C.3-1 Rural residential and rural estate projects in the Plan area shall conform to and implement the *Placer County Rural Design Guidelines*.
- 3.C.3-2 Landscaping shall be used to reduce the visual impact of all structures, including solid fences. Native vegetation should dominate where possible. Where existing vegetation is inadequate, the use of native plant materials is encouraged. Landscaping materials should provide an informal character and smooth transition between buildings, parking lots adjoining roadways and open space.
- 3.C.3-3 Where natural features are not available, landscaped buffer areas shall be created to minimize the adverse effects between adjacent uses.
- 3.C.3-4 The design of any new road or major road improvement project within Foresthill shall maintain the scenic and rural qualities of the area. Such design shall minimize impacts upon natural resources, agricultural lands and historic sites.
- 3.C.3-5 The use of solid fences around property shall be discouraged.
- 3.C.3-6 New lighting that shines onto adjacent properties or into the night sky shall not be permitted. The modification/removal of existing outdoor lighting of that type shall be encouraged.

Goal 3.C.4. Reduce visual clutter of overhead utility lines in the historic core area of Foresthill.

Policies

- 3.C.4-1 Overhead utility lines in the historic core area shall be consolidated, relocated and/or undergrounded. The County shall work with the applicable utilities to identify and obtain funds to implement this objective.
- 3.C.4-2 Whenever possible, new or replacement power hook-ups shall be brought to the rear of the structure instead of the front.

Goal 3.C.5. Provide for the signage needs of businesses on the Foresthill Divide while preserving the unique rural mountain character of the area and creating a "level playing field" for all businesses.

Policies

- 3.C.5-1 No internally illuminated signs shall be permitted within the Plan area. All signs shall be externally illuminated and otherwise consistent with the applicable design guidelines, if any.
- 3.C.5-2 Signage outside of commercial areas shall be discouraged. Signage along designated scenic corridors shall be limited to those necessary for public safety.

Goal 3.C.6. Preserve and protect the existing architectural and cultural features which give Foresthill its unique rural mountain identity.

Policies

- 3.C.6-1 The subdivision of property containing existing structures of cultural or aesthetic merit shall be carefully designed to preserve these structures and, where appropriate, utilize them as a focal point of neighborhood/community design.
- 3.C.6-2 Structures of historic or architectural significance shall be identified and documented, and efforts shall be made to preserve them and use them as a focal point of community design.

Goal 3.C.7. Take advantage of the best energy technology to maximize the energy efficiency of all buildings and structures.

Policies

- 3.C.7-1 Future land development projects shall promote energy and resource conservation, especially through consideration of alternative energy sources (i.e. passive solar collection) or state of the art energy and water conservation measures.

Goal 3.C.8. Create residential development which complements the rural surroundings, demonstrates an appreciation of natural open space areas, provides opportunities for non-auto transportation alternatives, and accommodates and encourages neighborhood interaction.

Policies

- 3.C.8-1 A neighborhood design plan for residential developments shall be developed that emphasizes pedestrian connectors within neighborhoods as well as between other residential areas. Other themes to be emphasized include small neighborhood parks and school/county transit bus stops, where appropriate.
- 3.C.8-2 Property owners shall be encouraged to leave a pathway adjacent to roadways for pedestrian use.
- 3.C.8-3 Subdivisions shall be designed to provide opportunities for small neighborhood active and passive recreation areas within the project site to complement and work with the community park and recreational facilities.

Goal 3.C.9. Protect the visual and scenic resources of the Foresthill Divide as an important quality-of-life amenity for local residents and as a principal asset in the promotion of recreation and tourism.

Policies

- 3.C.9-1 New development in scenic areas (e.g., river canyons, watersheds, scenic highway corridors, community gateways, ridgelines and steep slopes) outside the commercial core shall be planned in a manner which employs design, construction, and maintenance techniques that:
- Avoid locating structures along ridgelines and steep slopes such that they would be silhouetted from below or from a public road;
 - Incorporate design and screening measures to minimize the visibility of structures and graded areas;
 - Maintain the character and visual quality of the area.
 - Utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.
 - Incorporate landscaping that avoids significant discontinuity in landscaping vegetation between developed areas and adjacent open space or undeveloped areas.

- 3.C.9-2 New development, road construction or reconstruction shall incorporate sound soil conservation practices and minimize land alterations. Land alterations should comply with the following guidelines:
- Limit cuts and fills;
 - Limit grading to the smallest practical area of land;
 - Limit land exposure to the shortest practical amount of time;
 - Replant graded areas with native or non-invasive exotic species to ensure establishment of plant cover before the next rainy season; and
 - Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.
- 3.C.9-3 New roads, parking, and utilities shall be designed to minimize visual impacts. Unless limited by significant geological or engineering constraints, utilities should be installed underground and roadways and parking areas shall be designed to fit the natural terrain.
- 3.C.9-4 New development on hillsides shall employ design, construction, and maintenance techniques that:
- Ensure that development near or on portions of hillsides does not cause or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns;
 - Utilize erosion and sediment control measures including temporary vegetation (native or non-invasive exotic species) sufficient to stabilize disturbed areas;
 - Minimize risk to life and property from slope failure, landslides, fire and flooding; and
 - Maintain the character and visual quality of the hillside.
- 3.C.9-5 Roads, trails and paths shall be designed and constructed to minimize erosion and other disturbances to the natural terrain and vegetation. Such facilities shall be designed for economical maintenance.
- 3.C.9-6 Roads and other public works projects shall incorporate aesthetic values, as well as utility, safety and economy.

The Foresthill Community Design Guidelines have been formulated as part of the FDCP and are included as Appendix C of the FDCP. These Guidelines are an important long-term tool to help implement the FDCP. The intent of these Guidelines is to preserve the important asset of the FDCP's historic built environment and guide future design to create buildings worth preserving. The guidelines include criteria for the following areas:

- Historic Downtown Mixed-Use Area
- Mill Site Mixed-Use Area
- Canyon Mixed-Use Area

The Design Guidelines also provide guidance for the following subjects:

- Design Character (Single Family, Multifamily, Commercial, Industrial)
- Materials
- Site Planning
- Pedestrian Connections
- Views
- Landscaping
- Roofs
- Parking

- Utilities and Lighting
- Signs
- Crime Prevention through Design
- Historic Preservation

3.3.3 IMPACT EVALUATION CRITERIA

Appendix G of the State CEQA Guidelines provides four criteria for judging potentially significant impacts that are related to aesthetics:

- Would the project have a substantial adverse effect on a scenic vista?
- Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
- Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

In addition to the above, the Placer County General Plan, Placer County Design Guidelines Manual and Placer County Landscape Design Guidelines Manual contain goals, policies, standards and guidelines that can be used to judge the significance of impacts.

3.3.4 IMPACTS AND MITIGATION MEASURES

3.3-1 Alteration of views of the Plan area due to development in accordance with the FDCP.

Implementation of the FDCP will eliminate some views of areas that are currently undeveloped open space from surrounding roadways and properties, and will replace those views with residential, commercial, industrial and mixed-use development. While most of these areas are currently planned for development, in accordance with the CEQA Guidelines the impact must be measured against existing conditions. The forest vegetation and topography of the Plan area will limit the visibility of new development. The FDCP includes numerous goals and policies on the topic of community design that address the promotion, preservation and enhancement of the forested natural and rural atmosphere of the Plan area by requiring high aesthetic quality in all new development. All new development (including major remodeling and reconstruction) must comply with the Foresthill Community Design Guidelines (which are included in the FDCP), the Placer County Rural Design Guidelines, the Placer County Design Guidelines Manual, and the Placer County Landscape Design Guidelines. All new development must be designed to be compatible with the scale and character of the area. The gateway and scenic corridors that bring residents and visitors into the area must be protected and enhanced. More specifically, the

following goal and policy statements address the protection of visual and scenic resources in especially scenic areas:

Goal 3.C.9 Protect the visual and scenic resources of the Foresthill Divide as an important quality-of-life amenity for local residents and as a principal asset in the promotion of recreation and tourism.

3.C.9-1 New development in scenic areas (e.g., river canyons, watersheds, scenic highway corridors, community gateways, ridgelines and steep slopes) outside the commercial core shall be planned in a manner which employs design, construction, and maintenance techniques that:

- a. Avoid locating structures along ridgelines and steep slopes such that they would be silhouetted from below or from a public road;
- b. Incorporate design and screening measures to minimize the visibility of structures and graded areas;
- c. Maintain the character and visual quality of the area.
- d. Utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.
- e. Incorporate landscaping that avoids significant discontinuity in landscaping vegetation between developed areas and adjacent open space or undeveloped areas.

3.C.9-2 New development, road construction or reconstruction shall incorporate sound soil conservation practices and minimize land alterations. Land alterations should comply with the following guidelines:

- a. Limit cuts and fills;
- b. Limit grading to the smallest practical area of land;
- c. Limit land exposure to the shortest practical amount of time;
- d. Replant graded areas with native or non-invasive exotic species to ensure establishment of plant cover before the next rainy season; and
- e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.

3.C.9-3 New roads, parking, and utilities shall be designed to minimize visual impacts. Unless limited by significant geological or engineering constraints, utilities should be installed underground and roadways and parking areas shall be designed to fit the natural terrain.

3.C.9-6 Roads and other public works projects shall incorporate aesthetic values, as well as utility, safety and economy.

The FDCP also includes policies requiring the retention of open space areas in new development. Examples include:

3.B.3-3 The County shall require that significant natural, open space and cultural resources be identified in advance of development and incorporated into site-specific development project design.

3.B.3-7 The County shall require that all residential development provide private and/or public open spaces.

Mixed-Use areas are intended to incorporate an appropriate mix of residential, commercial, industrial, open space and other uses.

Although some alteration of views will occur, compliance with the FDCP goals and policies, the Foresthill Community Design Guidelines, and other Placer County design guidelines will assure

that new development meets an aesthetic standard and open space retention that is not currently required in the Plan area. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.3-2 Introduction of new sources of light and glare within the Plan area.

As described in the “Setting” section above, the primary sources of light in the Plan area include headlights on the roadway system (particularly Foresthill Road), commercial development, and industrial facilities. A lighting district has been established in Foresthill, which is limited to the historic downtown area. Residential areas do not have street lights, but some individual residences have security lighting.

The Placer County Rural Design Guidelines include a goal that encourages the minimization of artificial lighting on residences, other structures, and along roadways to limit the amount of light pollution. The Guidelines also recommend techniques designed to minimize light pollution.

The proposed FDCP includes the following policies related to lighting:

- 3.C.3-6 New lighting that shines onto adjacent properties or into the night sky shall not be permitted. The modification/removal of existing lighting of that type shall be encouraged.
- 3.C.5-1 No internally illuminated signs shall be permitted within the Plan area. All signs shall be externally illuminated and otherwise consistent with the applicable design guidelines, if any.
- 3.C.2-3 The County shall limit night lighting visible from the exterior of the building and the project’s boundaries to that necessary for security, safety, and identification. Night lighting shall also be screened from adjacent residential areas and not be directed in an upward manner or beyond the boundaries of the parcel on which the building is located.

Implementation Measure #29 for Natural Resources/Conservation/Open Space calls for adoption of a “dark sky” ordinance to protect important nighttime visual resources in the Plan area. Lighting is also addressed in the proposed Foresthill Community Design Guidelines.

Compliance with the goals, policies, implementation measures and Design Guidelines will reduce the contribution of new development to substantial changes in the lighting environment, and improve some existing conditions. However, in comparison to existing conditions, additional development will contribute to a *potentially significant cumulative impact* on the ambient light conditions in the Plan area.

Mitigation Measure

No additional mitigation measures are available. This will remain a *potentially significant cumulative impact*.

3.4 PUBLIC FACILITIES

3.4.1 INTRODUCTION

This section of the EIR describes and analyzes public services and facilities. Public services and facilities addressed in this section include: sewage disposal, water supply, education/schools, fire protection, public protection, drainage and water quality, public utilities, and other public services (including health services, solid waste, cemeteries, libraries, and postal facilities). The existing services are identified and the impact of the proposed FDCP upon the service capacity of each service provider is evaluated. This section also identifies the anticipated demand for each service that would result from implementation of the proposed FDCP. As appropriate, this section presents feasible mitigation measures that could reduce or avoid significant effects.

3.4.2 SETTING

PURPOSE

The purpose of this section of the FDCP is to address the Plan proposals and recommendations for provision of adequate public facilities and services. Placer County, numerous special districts, and State agencies all provide public facilities and services within the Plan area. In addition, many valuable services on the Foresthill Divide are provided by community volunteers.

Existing public services and facilities adequately serve the population, with the exception of schools. The Foresthill Unified School District and Placer Union High School District have experienced over-enrollment, and new high school and elementary school facilities are needed. Sites have been acquired for the new campuses, and construction of the schools is expected to eliminate the current problem.

Water supply for the Plan area is adequate to serve the buildout population; however, expansion of the water treatment facility will be necessary. Septic systems currently meet wastewater treatment needs for the large majority of developments within the Plan area. They will continue to be used for new development unless the density is too high or soil conditions are unacceptable, in which case a community wastewater system would be needed. Development fees and County Facility Fees will be used to fund improvement and expansion of existing public services and facilities.

SEWAGE DISPOSAL

There is no community sewer system in the Foresthill Divide Community Plan area; the only community sewerage systems (*i.e.* community leach fields, oxidation ponds) are those serving mobile home parks, two apartment complexes and four houses on one lot.

The effectiveness of septic systems remains limited in some areas by shallow soils, massive granitic rock complexes, and excessive slopes that are characteristic of the Plan area. The FDCP provides that the flat region running through the center of the Plan area be served by individual

sewage systems on parcel sizes of 2.3 acres or more. Large areas northwest and southwest of this flat area “are marginal to unacceptable for the proper functioning of individual sewage disposal systems”, and the ability to install on-site sewage systems is questionable, even for parcels ranging from 4.6 to 20 acres or larger.

There are areas within the Plan area, however, that do not have shallow soils, they have deep soils and are suitable for individual septic systems, such as Todd’s Valley. Other areas may be suitable with the use of engineered on-site sewage systems. Soil suitability for on-site sewage systems has been taken into consideration in development of the FDCP.

Future growth is expected to continue to be served by on-site sewage systems, unless action is taken by Placer County for development of a public sewer system in the area. However, there are no immediate plans for a public sewer system. With the growth that is expected to occur with buildout of the Plan area and the distant proximity of the Foresthill community to sewer, decentralized wastewater management will have to be developed. Larger sewage flow systems, engineered and enhanced treatment devices, and systems serving higher density land divisions will require maintenance and monitoring by an appropriate managing entity. Placer County Environmental Health Services is in the process of developing an Operation, Maintenance and Monitoring program (O, M and M) that would assist communities such as Foresthill in serving planned development through careful and considerate oversight of on-site sewage systems. Operation, maintenance and monitoring of Foresthill area systems will be consistent with any County-adopted O, M and M program.

WATER SUPPLY

Domestic water in the Plan area is principally supplied by two agencies: Foresthill Public Utility District (PUD) and Baker Ranch Water District. The PUD’s water treatment facility, located in Foresthill, consists of a direct filtration treatment plant that delivers the supply through a gravity-fed system of 21 inch to 10 inch lines. The treatment facility treats an average of 600,000 to 700,000 gallons per day, with a peak day volume of 1.9 million gallons. The facility has the capacity to treat a maximum 3 million gallons per day. The PUD supplies 900 acre-feet annually of treated/delivered water supply to the current population of 5,600 residents (Reed, pers. comm.). Water supply and transmission facilities will serve the buildout population of 13,500; however, an expanded treatment facility will be needed within the next 10 years to accommodate growth and water treatment in excess of 3 million gallons per day.

The Baker Ranch Mutual Water Company, a private water company, serves the Baker Ranch Mobile Home Park plus an additional 15 to 20 residences. Facilities include a deep well with 125 to 130 gallons per minute (gpm) capacity and a 50,000 gallon storage tank. Water quality is considered excellent.

EDUCATION/SCHOOLS

The Foresthill Union School District currently is comprised of two schools, both of which are located within the Plan area. Foresthill Elementary School serves grades Kindergarten through 5, and as of August 2000, 428 children were enrolled. Foresthill Divide Middle School serves

grades 6 through 8, and August 2000 enrollment totaled 264. Within the Plan area, high school students currently travel to Auburn to attend one of four high schools within the Placer Union High School District. Enrollment in the entire Placer Union High School District totals 4,783 students, of which 350 to 400 high school students lived in the Plan area in October 1999.

Enrollment within both districts exceeds capacity. With a 2000 total of 692 students enrolled in the Foresthill Union School District, enrollment exceeded capacity, although enrollment has dropped from a total of 817 students in 1995. The Placer Union High School District also reported enrollment exceeding capacity. Furthermore, current levels of enrollment create a safety problem in the bus loading area and with overuse of the septic system.

The high school and elementary school districts have jointly purchased a 110-acre site (a portion of the former mill site), of which 40 acres will be occupied by a new high school, 20 acres will be occupied by a new elementary school, and 50 acres will be commonly owned. A bond issue was passed by the voters to build a new high school, which is projected to be occupied by 2004.

FIRE PROTECTION

The urban-wildland interface occurs where development abuts wildlands, and is particularly susceptible to wildfires. Risk of hazard is increased with steep slopes, windy areas, and a hot, dry climate. According to the Placer County General Plan Background Report:

Fire hazards are identified by evaluating the type and amount of fuels, the topography, and climate. Hazards are greatest in areas with a ladder of rapidly ignitable fuels, such as grasses, that are adjacent to hotter and longer-burning fuels such as shrubs and trees. Steep slopes allow fires to preheat vegetation before climbing hillsides, which increases the rate of fire spread. Most fires start between May and October because the hot and dry weather conditions reduce plant moisture and make vegetation more susceptible to burning.

Wildland fires present a serious risk to residents and structures on the Foresthill Divide. The CDF Fire Hazard Severity Classification System was used to map the extreme, high, and moderate fire hazard areas on the Divide. Extreme hazard ratings are located in the steep sloping areas along the North and Middle Forks of the American River. High hazard areas generally exist surrounding the Todd's Valley Subdivision and in the Yankee Jim's area. Moderate rating occurs in the existing townsite of Foresthill and extending north along Foresthill Road to Baker Ranch on the level areas as well as in the Todd's Valley Subdivision.

CDF works with landowners to provide defensible space around structures, and is currently managing a program of mechanical brush removal and tree thinning in the Foresthill area, especially along roads. The purpose of the brush removal and tree thinning program is to reduce the extensive fuel loading which has occurred over the past century due to fire suppression activities. Additionally, CDF, in conjunction with Placer County, offers a service allowing residents to leave piles of cleared brush at the curb for CDF to reduce with a wood chipper.

The USFS Forest Plan Amendment includes fire and fuels management strategies, the goal of which is to alter fire regimes through a program of strategic fire hazard reduction treatments that reduce the potential for severe wildfire effects. Fire suppression capabilities would be enhanced by modifying fire behavior inside the urban wildland intermix zone. In order to influence uncharacteristically severe wildfires, many areas would receive fuel hazard reduction treatments. Treatment areas would be arranged to interrupt fire spread. Fuel reduction treatments are conducted in the urban wildland intermix zone using mechanical treatments, including timber harvest, and under certain conditions, prescribed fire. Presumably, portions of the Plan area that are adjacent to the Tahoe National Forest would benefit from the fuel reduction activities contemplated in the Forest Plan Amendment.

The Plan area is located in the Foresthill Fire Protection District and the Placer County Fire District. Fire protection within the townsite is currently provided by volunteers of the Foresthill Fire District. The District comprises 72 square miles, of which about 30 percent is in the National Forest. The District has three fire stations, only two of which are active stations. The third structure functions as an equipment storage building.

The Insurance Services Organization (ISO) classifies fire districts by level of hazard on a scale of 1 to 10, with 1 being the best rating. An ISO rating of 9 or 10 is considered standard for unimproved lands. The District maintains a class 6 ISO rating within the area where fire hydrants are available, and a class 9 ISO rating for unimproved lands.

The Foresthill Fire District is currently working on a five-year plan. Although the plan is not completed, there are two predictable generalizations: 1) full buildout will require additional fire stations and facilities, and 2) full-time fire fighter coverage will be necessary for full buildout. Currently, a 48-cent per square foot development fee is assessed upon new development to support fire protection services.

In addition to the Foresthill Fire District, Placer County contracts with the California Department of Forestry (CDF) to provide fire protection in outlying areas identified as State Responsibility Areas.

PUBLIC PROTECTION

The law enforcement needs of the unincorporated Foresthill Divide Community Plan area are served by the Placer County Sheriff's Department. The Department is organized into five divisions, three of which provide services to the Plan area: corrections, coroner, and marshal. The Sheriff's Department also provides patrol and investigation services out of the Foresthill substation. In addition, traffic enforcement and accident investigations in the unincorporated area are provided by the California Highway Patrol. The Sheriff's Department expects to continue to enlist volunteers to help staff the expansion of existing facilities and services.

DRAINAGE

Flooding can result in damage to the ecosystem, personal property, and can threaten life. Careful steps should be taken to avoid development in flood-prone areas and construction in flood plains.

According to the Placer County General Plan Background Report, flooding due to excessive rainfall can occur in Placer County anytime between November and May. The 1981 Foresthill General Plan states:

Special flood hazard areas have recently been mapped in Placer County by the U.S. Department of Housing and Urban Development. According to their maps there are only two flood hazard zones within the Plan area. The first is the Middle Fork of the American River which serves as the southern boundary for the plan. The second area is the North Fork of the American River running through the western portion of the Plan area within the [formerly] proposed Auburn Dam Take-line.

While the Plan area is prone to seasonal flooding, it is not located within a 100-year flood zone, as determined by Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs).

Dam failure presents additional flood hazards. Failure of the French Meadows Dam could threaten an estimated 20 persons and could inundate French Meadows Road and Highway 49 on the North Fork of the American River. Sugar Pine Dam would not threaten persons unless recreationists were in the vicinity at the time of dam failure. Iowa Hill Road, Shirttail Canyon Road, and Yankee Jim's Road could all be inundated.

PUBLIC UTILITIES

Electrical service is provided to residents within the Plan area by Pacific Gas & Electric Company (PG&E). No natural gas service is provided; however, propane may be used on individual parcels. Telecommunications service is provided by the Foresthill Telephone Company. The FDCP promotes undergrounding of overhead utility lines to reduce visual clutter and enhance the aesthetic appearance of the Plan area.

OTHER PUBLIC SERVICES

Health Services

Limited health and medical services are available in Foresthill. Medical attention is available through Foresthill Medical Center; dentistry and chiropractic services are also available in the Plan area. Emergency care and birthing services are provided through larger hospitals such as Auburn Faith Hospital in north Auburn and Sutter Roseville Hospital located in east Roseville. Ambulance service in the Plan area is provided by AMR ambulance service out of Auburn (under contract with Placer County) and the Safety Club, a volunteer organization that provides emergency medical response to the community. Med-evac helicopters (Cal Star, under contract with Placer County) can land, as necessary, at the schools, ball fields, and on Foresthill Road.

Solid Waste

Auburn Placer Disposal Service operates a transfer station on Patent Road in Foresthill that accommodates 90 cubic yards per day. It is open on Fridays, Saturdays, Sundays and Mondays. Residents are required to subscribe to Auburn Placer Disposal Service, and curbside pickup is available. Waste is transferred to the County's Western Regional Landfill near Roseville.

Other Government Services

Additional services available in the Plan area include, but are not limited to, County library services and social services. A general government Facility Fee is assessed and collected by the Placer County Building Department on new construction to assist in funding general government services.

The Placer County Library operates a 1,500 square foot branch facility in Foresthill that includes approximately 10,700 volumes. Computer terminals are available in the library to access the entire County library system and provide Internet access.

The Placer County Department of Health and Human Services (HHS) provides services to all residents of Placer County. According to the Placer County General Plan Background Report, the welfare case load has been increasing in absolute terms, but has decreased as a percentage of total County population over the same period of time. The Health Department has increased service levels to provide perinatal care, AIDS education, cancer risk reduction, an anti-smoking campaign, and the Women, Infants, and Children (WIC) Program.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to public facilities and services:

Goal 3.D.1. Ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

Policies

- 3.D.1-1 New development shall fund its fair share of the construction where such new development requires the construction of new public facilities. Land within newly developing areas shall be dedicated for public facilities, where necessary.
- 3.D.1-2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be approved where existing facilities are inadequate unless the following conditions are met:
 - a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means paid by the developer); and
 - b. The facilities improvements are consistent with applicable facility plans approved by the County or any other applicable agency.
- 3.D.1-3 Self-sufficient and alternative energy sources shall be encouraged with all new development projects.

Goal 3.D.2. Ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods. Development fees generated on the Divide shall be used to provide for public facilities required by new development.

Policies

- 3.D.2-1 New development shall pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding other than the pre-existing tax base can be identified to offset foregone revenues.
- 3.D.2-2 New development shall pay the cost of upgrading existing public facilities or construction of new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding other than the pre-existing tax base can be identified to offset foregone revenues.
- 3.D.2-3 The County shall seek broad-based funding sources for public facilities and services that benefit current and future residents of the Foresthill Divide.

Sewage Disposal

Goal 3.D.3. Ensure adequate wastewater collection and treatment and the safe disposal of liquid and solid waste.

Policies

- 3.D.3-1 The County shall permit on-site sewage treatment and disposal on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards.
- 3.D.3-2 The County shall be creative and innovative in reviewing onsite and alternative offsite sewage disposal systems to encourage higher density and mixed uses in the historic downtown core area.
- 3.D.3-3 The County shall continue to use current technically-based criteria in their review and approval of septic tank/leachfield systems and other systems such as graywater and composting toilets for rural development.
- 3.D.3-4 The County shall promote technologies that permit water reuse for irrigation, when public health is not endangered.

Water Supply

Goal 3.D.4. Ensure the availability of an adequate and safe water supply (potable and "fire flow") and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

Policies

- 3.D.4-1 All new development shall be required to demonstrate the availability of a long-term, reliable water supply. Written certification from the service provider shall be required that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

- 3.D.4-2 The County shall only approve new development based on the following guidelines for water supply:
- a. Higher density development should rely on public water systems.
 - b. Developments containing parcel sizes of one acre or less shall be required to connect to a treated water supply. In cases where parcels are larger than one acre and no public water system exists or can be extended to the property, individual wells may be permitted.
- 3.D.4-3 Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.
- 3.D.4-4 The County shall require that any new development adjacent to bodies of water that are used as domestic water sources be appropriately set back from the water source and adequately mitigate potential water quality impacts on these water bodies.
- 3.D.4-5 The watersheds of all bodies of water associated with the storage and delivery of domestic water shall be protected by limiting grading, construction of impervious surfaces, application of known toxic/hazardous substances and/or fertilizers and development of septic systems within these watersheds.
- 3.D.4-6 The County shall promote efficient water use and reduced water demand by:
- a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging water-conserving landscaping and other conservation measures;
 - c. Encouraging retrofitting existing development with water-conserving devices; and
 - d. Encouraging water-conserving agricultural irrigation practices.
- 3.D.4-7 The County shall support opportunities for groundwater users that are located in problem areas to convert to surface water supplies.
- Goal 3.D.5. The Foresthill Public Utility District shall ensure that adequate treatment and delivery facilities are in place to meet future water demands.**

Policies

- 3.D.5-1 The County shall ensure that an adequate quality and quantity of water is delivered to residents of the Foresthill area through continued cooperation with the US Bureau of Reclamation and the Foresthill Public Utility District.
- 3.D.5-2 The County shall discourage establishment of additional water treatment facilities not operated by either PCWA or the Foresthill Public Utility District.
- 3.D.5-3 The Foresthill Public Utility District shall continue to pursue the purchase of Sugar Pine Dam and Reservoir from the US Bureau of Reclamation.
- 3.D.5-4 Provide information regarding water availability to new residential, commercial and industrial projects in the community.

Education/Schools

- Goal 3.D.6. Provide the best possible programs and educational facilities to the children of Foresthill.**

Policies

- 3.D.6-1 Before approval of a residential development proposal, it shall be demonstrated to the satisfaction of the hearing body that adequate school facilities shall be provided when the need is generated by the proposed development.

Goal 3.D.7. Provide public schools serving students in grades K-12 that are physically and functionally integrated with their surrounding community.

Policies

- 3.D.7-1 Schools shall be planned as a focal point of community activity and interrelated with neighborhood retail uses, churches, parks, greenways and off-street paths, whenever possible.
- 3.D.7-2 New schools should be planned and designed to promote joint-use of facilities. New schools should be planned and designed to promote community use of recreational areas, i.e., fields, hardcourt surfaces, gyms, libraries, community meeting rooms, and emergency centers.
- 3.D.7-3 New schools should link with planned bikeways, pedestrian paths and other transportation routes, whenever possible.

Goal 3.D.8. Ensure that school facility planning and site acquisition is coordinated between school districts and other local governmental agencies.

Policies

- 3.D.8-1 The school districts serving the Divide should identify all existing and planned school sites and shall incorporate new schools into the overall community design. Due to the limited number of state approved school sites on the Foresthill Divide, the school districts must be involved in the early stages of planning with developers and governmental agencies.
- 3.D.8-2 The Districts' Board of Trustees and the State Department of Education shall approve school sites. Choice of future school sites shall take into consideration such things as access to all utilities and services, including sewer, water, gas, electricity, drainage, and transportation access.
- 3.D.8-3 The County should develop a policy which enhances a school district's ability to acquire school sites such as site reservation and dedication of sites.
- 3.D.8-4 Schools and governmental agencies should consider the joint and reciprocal use of facilities, equipment and personnel resources.

Goal 3.D.9. Create service levels that are equal to or better than State standards for classroom size, school enrollment, safety and school site size.

Policies

- 3.D.9-1 School site designations on land-use plans shall meet or exceed State standards for school land size.
- 3.D.9-2 The adopted Foresthill Union School District Facility and Financing Plan specifies the District's policies for grade configuration, school enrollment size, class size, school site sizes, funding options, and enrollment projections. Before approval by governmental agencies, all new projects should be in accord with the District's Facility and Financing Plan.

Goal 3.D.10. Ensure that school facilities are constructed and completed to coincide with the construction of new residential projects.

Policies

- 3.D.10-1 The County shall encourage all residential developers to consult with the school district early in the planning process.
- 3.D.10-2 Residential rezone, general plan and community plan amendments or other land-use entitlement requests shall not be approved unless accompanied by a finding that school facilities to accommodate projected students consistent with service level standards will be available in a timely manner to serve the project or that the project includes phasing conditions to ensure coordination of residential and school construction consistent with policy.

Goal 3.D.11. Provide adequate funds to construct a high school, elementary schools and remodel existing schools to keep pace with residential growth and changing curriculum needs.

Policies

- 3.D.11-1 The community, County and the school districts will work closely to explore all possibilities for securing adequate funding of new school facilities. This will include the development of local funding mechanisms as well as the utilization of state funds when they are available. Local resources may include the dedication of school sites (controlled land costs), developer fees, development agreements, Mello-Roos, and CFDs, assessment districts, redevelopment funds, general obligation bond proceeds and special taxes, etc.
- 3.D.11-2 When the school district has declared impaction and has developed a Facility and Financing Plan, the County will not approve a project until a will serve letter has been obtained by the developer from the school district.

Goal 3.D.12. Ensure that higher education programs and facilities offered by Sierra College, Placer High School, and other educational agencies are available to the Foresthill area to serve the community's needs.

Policies

- 3.D.12-1 Consider the joint and reciprocal use of facilities, equipment and personnel resources. "Community Learning Centers" are envisioned as joint-use facilities to be used by the College, businesses, city and community for a variety of purposes.
- 3.D.12-2 Pursue federal, state and private grants for facilities, equipment, special projects, transportation, technology, innovative educational programs and delivery systems and equipment that would enhance the community college system and the high school's adult programs for the residents of the Foresthill Divide.

Fire Protection

Goal 3.D.13. Protect residents of and visitors to Foresthill from injury, suffering, and loss of life and protect property and watershed resources from fires.

Policies

- 3.D.13-1 The County shall encourage the Foresthill Fire District to maintain the current minimum fire protection standard (expressed as Insurance Service Organization (ISO) ratings) of ISO 6 in areas serviced by hydrants, ISO 8 in areas with no hydrants.
- 3.D.13-2 The County shall encourage the Foresthill Fire District to maintain the following standards (expressed as average response times to emergency calls):

- a. Property: the arrival of the first fire apparatus at the point of need within 3 minutes "run time" 70% of the time and within 6 minutes 100% of the time.
- 3.D.13-3 The County shall encourage the Foresthill Fire District to achieve a response time equal to its run time.
- 3.D.13-4 The County shall require new development to develop or fund fire protection and medical aid facilities, personnel, and operations and maintenance that, at a minimum, maintain the above service level standards.
- 3.D.13-5 The County shall work with the Foresthill Fire District to identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses.
- 3.D.13-6 The County shall work with the Foresthill Fire District to implement ordinances to control fire losses and fire protection costs through fuel reduction management, use of automatic fire detection, control and suppression systems.
- 3.D.13-7 The County shall maintain and strengthen automatic aid agreements to maximize efficient use of available resources.
- 3.D.13-8 The County shall work with the Foresthill Fire District to maintain a prefire planning program with selected high-risk occupancies reviewed at least annually.
- 3.D.13-9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the *Uniform Fire Code* and other County and local ordinances.
- 3.D.13-10 The County shall work with local fire protection agencies to inventory and eliminate structurally unsafe and fire-hazardous housing units that are beyond repair or rehabilitation.
- 3.D.13-11 The County shall encourage the modification of vegetation around structures and developments to reduce radiant heat along fire escape routes providing for the safety of residents and fire fighting personnel. Fuel modification will reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation. These areas shall provide (1) increased safety for emergency fire equipment and evacuating civilians; (2) a point of attack or defense from a wildfire; and (3) strategic siting of fuel breaks, fire breaks, and greenbelts.
- 3.D.13-12 The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for a fire safe community, defensible space fire-resistant vegetation, cleared fire breaks and fuel breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas of Foresthill.
- 3.D.13-13 The County shall require that new development meet State, County, and local fire district standards for fire protection.
- 3.D.13-14 The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and television in order to increase public awareness of fire hazards within the county, and to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures.
- 3.D.13-15 The County shall work with local fire protection agencies, the California Department of Forestry and Fire Protection, and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression.
- 3.D.13-16 The County shall encourage and promote installation and maintenance of smoke detectors in existing residences and commercial facilities that were constructed prior to the requirement for their installation.

- 3.D.13-17 The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards.

Public Protection

- Goal 3.D.14. Provide adequate Sheriff's services to deter crime and to meet the growing demand for services associated with increasing population and commercial/industrial development in the county.**

Policies

- 3.D.14-1 Within the County's overall budgetary constraints, the County shall strive to maintain a staffing ratio (expressed as the ratio of officers to population) of 1:1,000 for the Foresthill Divide.
- 3.D.14-2 The County Sheriff shall strive to maintain the following average response times for emergency calls for service in Foresthill:
- a. 15 minutes in rural areas
 - b. 20 minutes in remote rural areas
- 3.D.14-3 The County shall continue to encourage volunteer assistance at the Sheriff's Department substation in town.
- 3.D.14-4 Within the County's overall budgetary constraints, the County shall provide Sheriff facilities (including substation space, patrol and other vehicles, necessary equipment, and support personnel) sufficient to maintain the existing service standards.
- 3.D.14-5 The County shall require new development to develop or fund Sheriff facilities that, at a minimum, maintain the existing standards.
- 3.D.14-6 The County shall consider public safety issues in all aspects of commercial and residential project design, including crime prevention through environmental design.
- 3.D.14-7 New development shall provide for its fair share of medical response services.

Stormwater Drainage

- Goal 3.D.15. Collect and dispose of stormwater in a manner that least inconveniences the public, reduces potential water-related damage, and enhances the environment.**

Policies

- 3.D.15-1 New storm drainage systems shall be designed to be in conformance with the Placer County Flood Control and Water Conservation District's *Stormwater Management Manual* and the *County Land Development Manual*.
- 3.D.15-2 Project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions shall be encouraged.
- 3.D.15-3 Projects that result in significant impacts on the quantity and quality of surface water runoff shall be required to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.
- 3.D.15-4 The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm drains, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control

Board, Placer County Environmental Health Services, Placer County Department of Public Works, Placer County Flood Control and Water Conservation District).

Flood Protection

Goal 3.D.16. Protect the lives and property of the citizens of the Divide from hazards associated with development in floodplains and manage floodplains for their natural resource values.

Policies

- 3.D.16-1 The County shall require that arterial roadways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.
- 3.D.16-2 The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics under fully-developed, unmitigated runoff conditions.

Goal 3.D.17. Flood management programs shall avoid alteration of waterways and adjacent areas, whenever possible.

Policies

- 3.D.17-1 Develop a drainage plan for the downtown area and prepare maps of this area that delineate drainage patterns and the drainage system of culverts, drop inlets, etc.
- 3.D.17-2 For reasons of safety and to reduce erosion, the County shall eliminate open ditches in the downtown area.

Public Utilities

Goal 3.D.18. Provide adequate public utility services consistent with the potential needs of the community.

Policies

- 3.D.18-1 The County shall pursue Rule 28 funding to underground the utilities in the downtown area (i.e., the Forest Service office near the Foresthill Divide Middle School to the California Department of Forestry and Fire Protection facility); the historic core area; and the area between Main Street and Foresthill Road. The County shall determine if the undergrounding project can be piggybacked to other development projects so that expenses can be shared.
- 3.D.18-2 An entity to broker power after electricity deregulation should be developed.
- 3.D.18-3 State of the art communications service should be provided to residents of the Foresthill Divide.
- 3.D.18-4 Developers shall install the latest telephone/communications technology in new projects.
- 3.D.18-5 As the need for larger facilities and expanded service grows and new services are required, efforts should be made to consolidate the different community services in one location.
- 3.D.18-6 As the need for other services arises, the Foresthill Public Utility District should be willing to administer those services if monies become available.
- 3.D.18-7 The provision of public facilities and services shall be limited in important timber areas on the Foresthill Divide.

- 3.D.18-8 Cable television access should be made available to all parcels in the Community Plan area.
- 3.D.18-9 New developments shall be required to provide cable television lines to development parcels.

Cemeteries

Goal 3.D.19. Ensure existing and future maintenance and security requirements of the many cemeteries in the community.

Policies

- 3.D.19-1 The County shall encourage and assist the community in their efforts to form a cemetery district.
- 3.D.19-2 The community shall acquire control of the local cemeteries and work to provide ongoing operations and maintenance.
- 3.D.19-3 The County shall identify the availability and locations of new land areas for the expansion of existing cemeteries and shall acquire such public land as it becomes available for such use.

Library

Goal 3.D.20. Ensure the continued operation and expansion of facilities and services of the community library.

Policies

- 3.D.20-1 The library should be more accessible to the public and should include additional morning and evening hours.
- 3.D.20-2 The library should serve as a technology center, providing potential interactive capabilities through the use of public computers.
- 3.D.20-3 The library should be located within the historic core area of Foresthill. Cooperative community use shall be encouraged with the high school library resources.
- 3.D.20-4 The County shall ensure that library facilities are provided to current and future residents on the Foresthill Divide. New development shall be required to fund its share of library facilities. In addition to the monies generated by new development, the community should seek new funding sources and/or funding increases to meet the increased demand on library services and facilities.

Postal Facilities

Goal 3.D.21. Ensure adequate postal facilities and mail delivery services to the community.

Policies

- 3.D.21-1 The Post Office shall be located within the core area, preferably within the historic core area.
- 3.D.21-2 The Post Office should implement the following to enhance the services provided to the community:
- Provide for mail drop-off boxes at various convenient locations on the Divide;
 - Extend the hours of operation during weekdays and Saturdays; and
 - Retain centralized services rather than the use of a mechanized substation.

Solid Waste

Goal 3.D.22. Ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

Policies

- 3.D.22-1 The County shall require waste collection in all new urban and suburban development.
- 3.D.22-2 The County shall promote maximum use of solid waste source reduction, recycling, composting and environmentally-safe transformation of wastes.
- 3.D.22-3 The County shall ensure that the transfer station is buffered from incompatible development.
- 3.D.22-4 The County shall require that all new development comply with applicable provisions of the *Placer County Integrated Waste Management Plan*.
- 3.D.22-5 The County shall develop an educational campaign designed to inform the community of the various services available (e.g., hazardous materials disposal, recycling, etc.) and offer incentives for the use of these services.
- 3.D.22-6 The County shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.

3.4.3 IMPACT EVALUATION CRITERIA

Based on Appendix G of the CEQA Guidelines, a significant environmental impact would occur if the proposed FDCP would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities
- Result in the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands
- Be inconsistent with the goals and policies in the *Placer County General Plan*.

Placer County has adopted required average response time standards through its General Plan policies, maintenance of ISO ratings, and compliance with fire safety standards, the UBC and applicable portions of the UFC through local ordinance.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement facilities

- Result in the need for new of physically altered law enforcement facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives

Placer County General Plan Policy 4.H.1 requires basic staffing ratios. The Placer County Sheriff's Department has established an impact report formula that provides for a higher level of law enforcement protection than identified in the General Plan. The Sheriff's Department standards call for one deputy per 1,000 residents in single family developments, two deputies per 1,000 residents for multiple family residential uses, one dispatcher per 5,500 residents, one jail officer per 2,512 residents, one clerical staff per 15,000 residents for records, and one additional clerical staff per 26,000 residents.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities
- Result in the need for new of physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Would not comply with federal, state, and local statutes and regulations related to solid waste
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Violate any water quality standards or waste discharge requirements
- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed
- Substantially deplete groundwater supplies

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place structures within a 100-year flood hazard area that would impede or redirect flood flows
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, or create a need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives
- Use scarce energy resources in a wasteful or inefficient manner
- Result in substantial adverse physical impacts associated with the provision of new or physically altered telecommunications/cable television facilities
- Need for new or physically altered telecommunications/cable television facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives
- Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities
- Need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives
- Be inconsistent with the Auburn-Placer County Library Long-Range Plan
- Result in substantial adverse physical impacts associated with provision of new or physically altered County facilities

- Need for new or physically altered County facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives

3.4.4 IMPACTS AND MITIGATION MEASURES

3.4-1 Provision of adequate sewage disposal services to serve the Plan area.

There is no community sewer system in the Plan area; the only community sewerage systems (i.e., community leach fields, oxidation ponds) are those serving mobile home parks, apartments, and multiple houses on one lot. Future growth will continue to be served by septic systems, unless required by Environmental Health Services. Sewer systems may be required for higher density development.

The proposed FDCP includes the following goal and policies that address this impact:

- | | |
|-------------|---|
| Goal 3.D.3. | Ensure adequate wastewater collection and treatment and the safe disposal of liquid and solid waste. |
| 3.D.3-1 | The County shall permit on-site sewage treatment and disposal on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards. |
| 3.D.3-2 | The County shall be creative and innovative in reviewing onsite and alternative offsite sewage disposal systems to encourage higher density and mixed uses in the historic downtown core area. |
| 3.D.3-3 | The County shall continue to use current technically-based criteria in their review and approval of septic tank/leachfield systems and other systems such as graywater and composting toilets for rural development. |

Implementation of these policies will assure that safe and adequate wastewater collection, treatment and disposal is provided within the Plan area, and impacts are therefore considered *less than significant*.

Water quality issues associated with onsite sewage disposal systems in the Plan area are addressed in Section 3.6 of this EIR.

Mitigation Measure

No mitigation measures are required.

3.4-2 Provision of a safe and adequate water supply and fire flow to serve the Plan area.

Domestic water in the Plan area is principally supplied by the Foresthill PUD and Baker Ranch Mutual Water Company. The PUD's water treatment system consists of a direct filtration plant that delivers the supply through a gravity-fed system. The facility treats an average of 600,000 to 700,000 gallons per day, with a peak day volume of 1.9 million gallons. The facility has the

capacity to treat a maximum 3 million gallons per day (mgd). The PUD supplies 900 acre-feet annually of treated/delivered water supply to the current population of 5,600 residents. Water supply and transmission facilities are adequate to serve the buildout population of 13,500; however, an expanded treatment facility will be needed within the next 10 years to accommodate growth and water treatment in excess of 3 mgd. The Baker Ranch Mutual Water Company serves a mobile home park and 15 to 20 additional residences. Water quality is considered excellent, and facilities are adequate to serve the planned population. Residences outside the service areas for these community water systems are served by individual wells; however, new residential development in the FDCP is planned for areas served by the Foresthill PUD.

The proposed FDCP includes the following goals and policies that address this impact:

- Goal 3.D.4. Ensure the availability of an adequate and safe water supply (potable and “fire flow”) and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.
- 3.D.4-1 All new development shall be required to demonstrate the availability of a long-term, reliable water supply. Written certification from the service provider shall be required that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.
- 3.D.4-2 The County shall only approve new development based on the following guidelines for water supply:
- a. Higher density development should rely on public water systems.
 - b. Developments containing parcel sizes of one acre or less shall be required to connect to a treated water supply. In cases where parcels are larger than one acre and no public water system exists or can be extended to the property, individual wells may be permitted.
- Goal 3.D.5. The Foresthill Public Utility District shall ensure that adequate treatment and delivery facilities are in place to meet future water demands.
- 3.D.5-1 The County shall ensure that an adequate quality and quantity of water is delivered to residents of the Foresthill area through continued cooperation with the U.S. Bureau of Reclamation and the Foresthill Public Utility District.
- 3.D.5-2 The County shall discourage establishment of additional water treatment facilities not operated by the Foresthill Public Utility District.

Implementation of these policies will assure that there is a safe and adequate water supply and fire flow for new development in the Plan area. This impact is therefore considered ***less than significant***.

The environmental impacts associated with an expanded water treatment facility must be addressed by the Foresthill PUD in accordance with the California Environmental Quality Act at the time that approval of the facility is considered.

Mitigation Measure

No mitigation measures are required.

3.4-3 Provision of adequate schools to serve the Plan area.

As reported in the “Setting” discussion, enrollment in both the Foresthill Elementary School and Placer Union High School (which serve the Plan area) exceeds capacity. However, the districts have jointly purchased a 110-acre site in the community of Foresthill for construction of a new high school and a new elementary school. The new high school is projected to be occupied by 2004. In addition to relieving overcrowding, it will provide a high school within the Plan area for the first time, thus not requiring students to be bussed to otherwise be transported to Auburn to attend high school.

The proposed FDCP includes the following goals and policies related to adequate school facilities:

- Goal 3.D.6. Provide the best possible programs and educational facilities to the children of Foresthill.
- 3.D.6-1 Before approval of a residential development proposal, it shall be demonstrated to the satisfaction of the hearing body that adequate school facilities shall be provided when the need is generated by the proposed development.
- Goal 3.D.10. Ensure that school facilities are constructed and completed to coincide with the construction of new residential projects.
- 3.D.10-2 Residential rezone, general plan and community plan amendments or other land-use entitlement requests shall not be approved unless accompanied by a finding that school facilities to accommodate projected students consistent with service level standards will be available in a timely manner to serve the project or that the project includes phasing conditions to ensure coordination of residential and school construction consistent with policy.
- Goal 3.D.11. Provide adequate funds to construct a high school, elementary schools and remodel existing schools to keep pace with residential growth and changing curriculum needs.
- 3.D.11-1 The community, County and the school districts will work closely to explore all possibilities for securing adequate funding of new school facilities. This will include the development of local funding mechanisms as well as the utilization of state funds when they are available. Local resources may include the dedication of school sites (controlled land costs), developer fees, development agreements, Mello-Roos, and CFDs, assessment districts, redevelopment funds, general obligation bond proceeds and special taxes, etc.
- 3.D.11-2 When the school district has declared impactation and has developed a Facility and Financing Plan, the County will not approve a project until a will serve letter has been obtained by the developer from the school district.

The County is currently limited by State law in denying development projects based on the availability of school facilities. The Leroy F. Greene School Facilities Act of 1998 (SB 50) and the bond procedures under Proposition 1A of 1998 regulate school facilities financing and mitigation of land use approvals by setting fee caps; remove entitlement application denial authority from lead agencies; and set the CEQA standard for full and complete mitigation for

school facilities. State law currently prohibits a local agency from either denying approval of a land use project because of inadequate school facilities, or imposing school impact mitigation measures other than the designated fees provided for in the Government Code. Effective subsequent to 2006, if a statewide bond measure fails, SB 50 would again permit a county to deny or refuse to approve a development project that requires a legislative act on the basis of the inadequacy of school facilities. However, the county will not be able to require a higher fee than provided for in the original legislation.

The two school districts currently divide impact fees received from new development. Implementation of the goals and policies of the FDCP (in compliance with State law), together with planned construction of new school facilities and impact fees received by the districts, will result in a *less than significant impact*.

Mitigation Measure

No mitigation measures are required.

3.4-4 Provision of adequate fire protection services and facilities to serve the Plan area.

The Plan area is located within the Foresthill Fire Protection District and the Placer County Fire District. Fire protection within the Foresthill townsite is currently provided by volunteers of the Foresthill Fire District. The District maintains three fire stations, two of which are active and a third which is used for storage. The Foresthill Fire District has concluded that full buildout of the Plan area will require additional fire stations and facilities and full-time paid fire fighter coverage. A 48-cent per square foot development fee is currently assessed upon new development in the Plan area to support fire protection services.

Placer County contracts with the California Department of Forestry (CDF) to provide fire protection in outlying areas identified as State Responsibility Areas. Wildland fires present a serious risk to residents and structures in the Plan area. The CDF Fire Hazard Severity Classification System was used to map extreme, high, and moderate fire hazard areas. Extreme hazard ratings are located in the steep sloping areas along the North and Middle Forks of the American River. High hazard areas generally exist surrounding the Todd's Valley subdivision and in the Yankee Jim's area. Moderate rating occurs in the Foresthill townsite and extending north along Foresthill Road to Baker Ranch on the level areas, as well as within the Todd's Valley subdivision.

The proposed FDCP includes the following policies that address this impact:

- 3.D.13-1 The County shall encourage the Foresthill Fire District to maintain the current minimum fire protection standard (expressed as Insurance Service Organization (ISO) ratings) of ISO 6 in areas serviced by hydrants, ISO 8 in areas with no hydrants.
- 3.D.13-2 The County shall encourage the Foresthill Fire District to maintain the following standards (expressed as average response times to emergency calls):
 - a. Property: the arrival of the first fire apparatus at the point of need within 3 minutes "run time" 70% of the time and within 6 minutes 100% of the time.

- 3.D.13-3 The County shall encourage the Foresthill Fire District to achieve a response time equal to its run time.
- 3.D.13-4 The County shall require new development to develop or fund fire protection and medical aid facilities, personnel, and operations and maintenance that, at a minimum, maintain the above service level standards.
- 3.D.13-6 The County shall work with the Foresthill Fire District to implement ordinances to control fire losses and fire protection costs through fuel reduction management, use of automatic fire detection, control and suppression systems.
- 3.D.13-9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.
- 3.D.13-11 The County shall encourage the modification of vegetation around structures and developments to reduce radiant heat along fire escape routes providing for the safety of residents and fire fighting personnel. Fuel modification will reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation. These areas shall provide (1) increased safety for emergency fire equipment and evacuating civilians; (2) a point of attack or defense from a wildfire; and (3) strategic siting of fuel breaks, fire breaks, and greenbelts.
- 3.D.13-12 The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for a fire safe community, defensible space fire-resistant vegetation, cleared fire breaks and fuel breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas of Foresthill.
- 3.D.13-13 The County shall require that new development meet State, County, and local fire district standards for fire protection.
- 3.D.13-15 The County shall work with local fire protection agencies, the California Department of Forestry and Fire Protection, and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression.
- 3.D.13-17 The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards.

Many of these policies involve working with other agencies, including the Foresthill Fire District. The goals and policies do not address the provision of additional fire stations and converting from a volunteer to a full-time paid fire protection service. Although fees are collected from new development, it is not clear whether these will be adequate to fund new stations, equipment and paid personnel. Although the County has the ability to deny projects that do not provide for adequate fire protection, providing the facilities, equipment and personnel are outside the control of the County and cannot be assured. Therefore, this impact is considered ***potentially significant***, and may not be mitigated to a level that is less than significant.

Mitigation Measure

Mitigation measures are available, but are outside the control of the County. This impact is therefore considered to remain ***potentially significant***.

3.4-5 Provision of adequate public protection to serve the Plan area.

The law enforcement needs of the Plan area are served by the Placer County Sheriff's Department. The Sheriff's Department provides patrol and investigation services out of the Foresthill substation. Traffic enforcement and accident investigations are provided by the California Highway Patrol. The Sheriff's Department expects to continue to enlist volunteers to help staff the expansion of existing facilities and services.

The FDCP includes the following goal and policies that address this impact:

- Goal 3.D.14. Provide adequate Sheriff's services to deter crime and to meet the growing demand for services associated with increasing population and commercial/industrial development in the county.
- 3.D.14-1 Within the County's overall budgetary constraints, the County shall strive to maintain a staffing ratio (expressed as the ratio of officers to population) of 1:1,000 for the Foresthill Divide.
- 3.D.14-1 The County Sheriff shall strive to maintain the following average response times for emergency calls for service in Foresthill:
- a. 15 minutes in rural areas
 - b. 20 minutes in remote rural areas
- 3.D.14-3 The County shall continue to encourage volunteer assistance at the Sheriff's Department substation in town.
- 3.D.14-4 Within the County's overall budgetary constraints, the County shall provide Sheriff facilities (including substation space, patrol and other vehicles, necessary equipment, and support personnel) sufficient to maintain the existing service standards.
- 3.D.14-5 The County shall require new development to develop or fund Sheriff facilities that, at a minimum, maintain the existing standards.
- 3.D.14-7 New development shall provide for its fair share of medical response services.

Because compliance with public protection policies is within the control of the County, implementation of these policies will assure that impacts in the Plan area are *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.4-6 Provision of adequate flood protection and stormwater drainage for the Plan area.

While the Plan area is prone to seasonal flooding due to excessive rainfall between November and May, it is not located within a 100-year flood zone, as determined by Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

The proposed FDCP includes the following policies that address this impact:

- 3.D.15-1 New storm drainage systems shall be designed to be in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual.

- 3.D.15-2 Project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions shall be encouraged.
- 3.D.15-3 Projects that result in significant impacts on the quantity and quality of surface water runoff shall be required to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.
- 3.D.15-4 The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm drains, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Division of Environmental Health, Placer County Department of Public Works, Placer County Flood Control and Water Conservation District).
- 3.D.16-1 The County shall require that arterial roadways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.
- 3.D.16-2 The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics under fully-developed, unmitigated runoff conditions.
- 3.D.17-1 Develop a drainage plan for the downtown area and prepare maps of this area that delineate drainage patterns and the drainage system of culverts, drop inlets, etc.

Implementation of these policies will assure that flood protection and stormwater drainage impacts in the Plan area will be *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.4-7 Provision of adequate public utilities to serve the Plan area.

Electrical service is provided by Pacific Gas & Electric Company within the Plan area. No natural gas service is provided; however, propane may be used on individual parcels. Telecommunications service is provided by the Foresthill Telephone Company.

The proposed FDCP includes the following goal and policies that address this impact:

- Goal 3.D.18. Provide adequate public utility services consistent with the potential needs of the community.
- 3.D.18-3 State of the art communications service should be provided to residents of the Foresthill Divide.
- 3.D.18-4 Developers shall install the latest telephone/communications technology in new projects.
- 3.D.18-8 Cable television access should be made available to all parcels in the Community Plan area.
- 3.D.18-9 New developments shall be required to provide cable television lines to development parcels.

Electrical service is available in the Plan area. Implementation of the policies in the FDCP will assure that new development is provided with telecommunications and cable television service. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.4-8 Provision of adequate cemeteries, libraries, postal facilities, health services, and solid waste collection and disposal services for the Plan area.

Limited health and medical services are available in the Plan area. Emergency care and hospital services are provided at Auburn Faith Hospital in north Auburn and Sutter Roseville Hospital in east Roseville. Ambulance service is provided by AMR ambulance service out of Auburn and the Safety Club, a volunteer organization that provides emergency medical response to the community. Helicopters to transport individuals with medical emergencies to hospitals can land in Foresthill as necessary.

Auburn Placer Disposal Service operates a transfer station on Patent Road in Foresthill. Residents are required to subscribe to Auburn Placer Disposal Service, and curbside pickup is available. Waste is transferred to the County's Western Regional Landfill near Roseville.

Additional services available in the Plan area include County library services and social services. A general government facility fee is assessed and collected by Placer County on new construction to assist in funding general government services. A branch of the Placer County Library operates in Foresthill.

The proposed FDCP includes the following policies that address this impact:

- 3.D.19-1 The County shall encourage and assist the community in their efforts to form a cemetery district.
- 3.D.19-2 The community shall acquire control of the local cemeteries and work to provide ongoing operations and maintenance.
- 3.D.19-3 The County shall identify the availability and locations of new land areas for the expansion of existing cemeteries and shall acquire such public land as it becomes available for such use.
- 3.D.20-4 The County shall ensure that library facilities are provided to current and future residents on the Foresthill Divide. New development shall be required to fund its share of library facilities. In addition to the monies generated by new development, the community should seek new funding sources and/or funding increases to meet the increased demand on library services and facilities.
- 3.D.21-2 The Post Office should implement the following to enhance the services provided to the community:
 - a. Provide for mail drop-off boxes at various convenient locations on the Divide;
 - b. Extend the hours of operation during weekdays and Saturdays; and
 - c. Retain centralized services rather than the use of a mechanized substation.
- 3.D.22-1 The County shall require waste collection in all new urban and suburban development.
- 3.D.22-4 The County shall require that all new development comply with applicable provisions of the *Placer County Integrated Waste Management Plan*.

Although the County does not control the actions of the U.S. Postal Service, that agency is required to provide mail delivery or mail pickup services. Implementation of the proposed policies will assure that impacts on other government services are *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.5 PARKS AND RECREATION

3.5.1 INTRODUCTION

This section of the EIR describes and analyzes parks and recreation facilities and programs in the Plan area. The existing facilities and services are identified, and the impact of the proposed FDCP upon these facilities and programs is evaluated. This section also identifies existing and potential future service providers, as well as feasible mitigation measures that could reduce or avoid potential significant effects.

3.5.2 SETTING

Parks and recreation are an important part of the quality of life in the Foresthill Divide. The purpose of the Parks and Recreation section of the FDCP is to ensure that adequate recreation facilities are provided to both the residents of and visitors to the Plan area. This includes both “passive” recreational facilities (such as open space and picnic areas) and “active” facilities (such as ball fields). Trails for pedestrians, equestrians, and bicyclists are an important feature of the Plan area, and are heavily used both by local residents and visitors. Increasing connections between trails and filling in existing gaps in the trail network are a theme of the FDCP.

Rural living is natural and unstructured in comparison to urban lifestyles and the amenities that accompany urban lifestyles. In terms of recreation, rural communities are more likely to appreciate and utilize open space and “passive” recreational opportunities. Passive recreation is by no means passive in nature, but is distinguished from improved parklands and recreational facilities such as basketball and tennis courts, baseball and soccer fields, skate ramps, and swimming pools. Passive recreation includes boating, hiking, camping, picnicking, horseback riding, snowshoeing, and cross-country skiing. Passive recreation is considerably less infrastructure-intensive, and generally less intrusive on the natural environment.

Development of new linkages between trails and connecting trail systems have been identified as a priority in the FDCP. Existing public utility easements are one potential resource for creating such linkages.

EXISTING PARK AND RECREATION FACILITIES AND PROGRAMS

Forest Recreation

There is both high demand for and high availability of passive recreational opportunities on the Foresthill Divide. The Tahoe National Forest is laced with trails for use by pedestrians, equestrians, bicyclists, and off-road vehicle enthusiasts. The Foresthill Trail Alliance is active in the maintenance and acquisition of trails within more populated areas of the Foresthill Divide. The Community Plan Team has indicated that there is a need and desire for more developed recreational facilities in the Plan area.

Residents of the Plan area have access to a variety of outstanding regional recreational opportunities. The proximity of U.S. Forest Service (USFS) lands, U.S. Bureau of Land Management (BLM) lands, and U.S. Bureau of Reclamation (BOR) lands provides residents and visitors with areas for hiking, boating, fishing, off-highway vehicle (OHV) usage, swimming, and camping. Within the Plan area, Sugar Pine Reservoir, Big Reservoir (Morning Star Reservoir), and Oxbow Recreation Area are federally owned recreation areas that offer camping, boating, winter recreation, hiking, and OHV facilities. These locations and facilities are summarized in Table 3.5-1, along with recreational facilities located outside but near the Plan area that are used by residents of the Divide, and have access through the Plan area. The North and Middle Fork American River supports a large commercial rafting business during the summer months, bringing significant volumes of traffic through the community of Foresthill. Due to the proximity to publicly owned lands, including the Granite Chief Wilderness, Foresthill has tremendous potential as a “take-off” point to back-country lakes and recreation areas.

Auburn State Recreation Area (SRA) is located within the westernmost portion of the Plan area, along the North and Middle Fork of the American River extending east from Auburn. The SRA covers over 35,000 acres, and includes Lake Clementine and 13 other areas with fully developed facilities for environmental education, camping, boating, mountain biking, whitewater rafting, gold-panning, OHV riding, and hiking. The Auburn SRA is administered by the California Department of Parks and Recreation under a contract with the U.S. Bureau of Reclamation.

Community Recreation

Closer to the community of Foresthill, residents can enjoy a small variety of recreational opportunities. All organized recreational programs in the community are operated and managed by volunteer boards. Foresthill Community Park (Leroy E. Botts Memorial Park) is a 15 acre community park located on Harrison Street between Church Street and Gold Street. The park facilities are heavily used, especially on weekends. Park facilities include softball and baseball fields, a tot lot, picnic area, horseshoe pits, restrooms, a gazebo and barbecue pit. There is a public swimming pool that is operated by volunteers but which has substantial maintenance needs. Within the Todd’s Valley area, there are 41.1 acres of unimproved parklands. The Todd’s Valley Pond is a 26.7 acre site that includes a fishing pond. Two additional park sites located in the Plan area are unmaintained, unimproved open space totaling 14.4 acres. Foresthill Elementary School and Foresthill Divide Middle School, 6 acres and 16 acres respectively,

provide additional open space and fields that are widely used after hours for community sports programs.

As the Foresthill Divide continues to grow with anticipated increases in population, recreation will continue to be an important and necessary part of the rural mountain lifestyle and visitor experience. The new Foresthill High School site and the adjacent elementary school site will contribute an additional 30 acres to community recreation facilities. Consideration should be given to the expansion of recreational opportunities and facilities, including the management of recreation within the Plan area. There have been community-driven proposals to form a Foresthill Recreation District to be managed by the Foresthill PUD through a joint powers agreement between the PUD and the elementary school district. Identification of a stable funding source to operate and maintain facilities, as well as deferred maintenance costs, is essential to the establishment of a viable JPA. A locally managed Recreation District could greatly benefit the community as it absorbs new growth.

Trails

The Foresthill Divide Community Plan area offers an extensive, multi-use trail system that provides recreational opportunities for those enjoying hiking, biking, running, horseback riding and cross-country skiing. Trails are concentrated along the Middle and North Fork of the American River, and northeast of Foresthill within the Tahoe National Forest.

The trail system in the Plan area is strongly supported and widely used by residents and visitors alike. The community survey conducted for the Foresthill Divide Community Plan indicated that trails and trail access are a high priority to local residents. The rural community character is complemented by a network of trails that provides residents with opportunities for recreation and a pleasant alternative to motorized transportation. According to the Forest Service, some of the trails have been used for thousands of years by Indians and, in more recent times, by miners traveling to and from their claims. Trails are an integral part of the Foresthill Divide and have historical, cultural, and recreational importance.

Forest Service trails on the Foresthill Divide are under the jurisdiction of the Foresthill Ranger District and are maintained by the Tahoe National Forest. As shown in Table 3.5-2, the Forest Service trail system offers over 30 miles of trails for recreational use within the Plan area. Many of the trails are available to equestrians and mountain bikers as well as hikers, and are located in the French Meadows and North Fork of the American River areas.

Table 3.5-I Summary of Recreational Areas and Facilities In or Near the Plan Area

Recreation Area	Acreage	Campground	Boating/ Fishing	Swimming	Picnic Area	Gold Panning	Trails	Sports Fields	OHV Area
Auburn State Recreation Area	35,000	X	X	X	X	X	X		X
Big Reservoir Area/Morning Star	N/A	X	X				X		
Big Trees Grove*	N/A				X		X		
China Wall Recreation Area*	N/A						X		X
Foresthill Elementary School	6							X	
Foresthill Community Park (Leroy E. Botts)	15				X			X	
Foresthill Middle School	16							X	
Sugar Pine Reservoir	N/A	X	X	X			X		
Todd's Valley Pond and 2 sites	41.1		X				X		
French Meadows*/Hellhole Reservoir*		X	X				X		
Poppy Campground		X							
Giant Gap		X							
Shirttail Creek		X							

*Located outside Plan area
Source: Quad Knopf, 2000.

Table 3.5-2 Trails On or Near the Foresthill Divide

TRAIL	LENGTH	LOCATION
American River Trail	7.6 mi.	Tahoe National Forest, North Fork American River Area
Bearcroft Trail	2 1/4 mi.	Tahoe National Forest, North Fork American River Area
Big Trees Interpretive Trail	3/8 mi.	Tahoe National Forest, Foresthill Area
Codfish Falls Trail	3 mi.	Ponderosa Way Bridge along North Fork American River
Confluence Trail	1.8 mi.	Mammoth Bar Rd. to the Confluence
Euchre Bar Trail	7.5 mi.	Tahoe National Forest, North Fork American River Area
Fire Break Trail	1.5 mi.	Lake Clementine Rd. to east end of Foresthill Bridge
Forest View Trail	1.5 mi.	Tahoe National Forest, Foresthill Area
Green Valley Trail	2 1/4 mi.	Tahoe National Forest, North Fork American River Area
Italian Bar Trail	2.3 mi.	Tahoe National Forest, North Fork American River Area
Olmstead Loop Trail	8.5 mi.	Starts at Firehouse in Cool (ptn. in El Dorado Co.)
Lower half of CA St.	9 mi	between Peachstone Trail and bottom of Driver's Flat Rd.
Lower McKeon-Ponderosa Trail	3 mi.	from gate to the Middle Fork
McGuire Trail (segment of WST)	3 7/8 mi.	Tahoe National Forest, French Meadows Area
McKeon-Ponderosa Loop Trail	3 mi.	Starts below White Oak Flat
Michigan Bluff to Deadwood Trail	6 mi.	Tahoe National Forest, Foresthill Area
Mosquito Ridge Trail	1.25 mi.	Tahoe National Forest, Foresthill Area
Mumford Bar Trail	3 1/4 mi.	Tahoe National Forest, North Fork American River Area
Mumford Bar Trail	12 mi.	10 miles North of Foresthill
North Fork of the Middle Fork Trail	1.1 mi.	Tahoe National Forest, Mosquito Ridge area
Old Lake Clementine Trail	1.7 mi.	Old Foresthill Road Bridge to Lake Clementine Rd.
Pointed Rocks Trail	1.4 mi.	No Hands Bridge towards Cool to Knickerbocker Area
Quarry Road Trail	5.6 mi.	Hwy 49 Bridge to Main Bar on Middle Fork (ptn. El Dorado Co.)
Sailor Flat Trail	3.3 mi.	Tahoe National Forest, North Fork American River Area
Stagecoach Trail	1.8 mi.	Auburn to Old Foresthill Bridge, along North Fork
Todd's Valley Trail	2 mi.	Todd's Valley Area
Upper half of CA St.	9 mi	between Foresthill and Peachstone Trail
Volcano Canyon (segment of WST)	6 mi.	between Michigan Bluff and Foresthill
Western States Trail (WST)	100 mi.	Squaw Valley to Auburn

Source: Foresthill Trails Alliance, National Forest Service, California Dept. of Parks and Recreation.

In addition to federally managed and maintained trails, private roads and logging roads provide opportunities for trail-related recreation. The Foresthill Trails Alliance (FTA), a non-profit community organization that acquires and preserves trails on the Foresthill Divide, works to secure easements through public and private property in support of a regional trails system. The FTA promotes legislation to permanently preserve and protect established and new trails. The FTA maintains portions of the 100-mile Western States Trail that runs from Squaw Valley to Auburn. A world-class running event and a world-class equestrian event are held along the Western States trail every summer. Continued access to this trail is very important to residents of the Divide. The Auburn Placer Disposal Service transfer station site could also be utilized as a staging area, providing additional access to the trail.

Strong community support in combination with the leadership of the FTA has helped with maintenance of existing trails and the development of additional trails. Identification of additional trails and their maintenance are a high priority among local residents. The 10-mile

Foresthill Divide Loop trail was completed in 1999 with the help of volunteer community labor. That trail, managed by State Parks, is located on BOR land that was acquired for the Auburn Dam, a project that has never been constructed. The trail parallels both sides of Foresthill Road. A new 3-mile multi-use trail segment has been constructed that extends the trail toward Auburn from Lower Lake Clementine Road. Currently referred to as the “connector trail”, a formal name has not yet been designated by State Parks. The County and State Parks are working with interested groups to develop a plan for the first phase of an ambitious trail project called the “Capital to Capital trail” that would eventually provide a trail route from Sacramento to Carson City. The first phase is for an 8-mile multi-use trail segment from the confluence of the American River to Ponderosa Road along the North Fork of the American River. The FTA is in favor of building the trail and hoping a route can be found that minimizes any environmental impact. The Monte Verde Estates development has constructed a trail segment through the development that provides access to public land. Currently this trail segment ends at the fence at the border of the public land. The FTA is working with State Parks to try to eventually link to a further extension to the Foresthill Divide Loop Trail behind the Monte Verde Estates development.

Additional momentum exists to expand the trail system by creating a trail staging area at the Foresthill Landfill site. The staging area would provide multi-use recreation facilities at the former landfill site. Limited public use of the landfill site is a creative solution to the closure of a solid waste facility, and would be an asset to the existing trail system on the Foresthill Divide. Development of a plan for the conversion of the landfill to limited public use should be done in conjunction with the development of the Foresthill Divide Community Plan.

An informal network of trails also exists in the Foresthill community and in Todd’s Valley/McKeon-Ponderosa Road. In Foresthill, a trail exists along some portions of Foresthill Road, although it is not continuous.

Over 50 miles of old mining ditches remain on the Foresthill Divide from hydraulic mining and drift mining practices of the 1800’s. The Foresthill Historical Society has inventoried 55 ditches, and noted that “the mining ditches might be good sites for potential trails since they usually are on mostly flat routes and are of great historical interest”. The construction of trails alongside the ditches would enhance the existing trail system, preserve areas of historical interest, and facilitate pedestrian connectivity within the community.

Policies and programs relevant to the development of a trail system are located in the Placer County General Plan and the Placer County Trails Master Plan.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to parks and recreation:

Goal 3.E.1. Provide recreation facilities/opportunities for the residents of the Plan area.

Policies

3.E.1-1 The County shall strive to achieve and maintain a standard of 5 acres of improved parkland and 5 acres of passive recreation area or open space per 1,000 population.

- 3.E.1-2 In accordance with the park development standards, the County shall strive to achieve the following park facility standards:
- a. 1 tennis court per 2,000 residents
 - b. 1 swimming pool in the Plan area
 - c. 1 community center in the Plan area
 - d. 1 softball field per 5,000 residents
 - e. 1 basketball court per 5,000 residents
 - f. 1 neighborhood park per elementary school neighborhood
 - g. 1 community park per community
 - h. 1 volleyball court per 5,000 residents
- 3.E.1-3 The County shall require the dedication of land and/or payment of fees, in accordance with state law (Quimby Act), to ensure funding for the acquisition and development of public recreation facilities. The fees are to be set and adjusted as necessary to provide for a level of funding that meets the actual cost to provide for all of the public parkland and park development needs generated by new development.
- 3.E.1-4 The County shall ensure that park design is appropriate to the recreational needs and, where feasible, provides access capabilities to all residents, employees, and visitors of Placer County.
- 3.E.1-5 The County shall require the inclusion of new subdivision lands in a type of financing district (such as a County Service Area or Landscape and Lighting District) to generate sufficient funds to operate and maintain new public park facilities provided in the area.
- Goal 3.E.2. Develop and maintain centralized recreational facilities providing a variety of parks and programs to serve the needs of present and future residents and visitors.**

Policies

- 3.E.2-1 New residential development shall provide park facilities in accordance with Placer County standards. The creation of community parks (15+ ac.) is more desirable than several small, isolated facilities.
- 3.E.2-2 The Foresthill Divide has an abundance of public passive open space and outdoor recreational opportunities and facilities, i.e., Tahoe National Forest and Auburn State Recreation Area. Development dedication fees would be more appropriately used for development of new parks, facilities or easements for new trails. By way of implementation of the Park Dedication Ordinance (Quimby Act), “in-lieu” fees or construction of desired recreation facilities shall be given priority over acquisition/acceptance of land.
- 3.E.2-3 Expand the powers of the Foresthill Public Utility District, or pursue the creation of a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs. The implementation of this policy is a high priority of the community.
- 3.E.2-4 Encourage expansion of the Joint Powers Agreement between Placer County, the Foresthill Union School District, Placer Union High School District and a Local Recreation District, if so approved, to provide recreational facilities and programs for the community. Some possibilities of this program would be the development of the new High School-Elementary School site, jointly funding the development of ballfields, swimming pool complex, a stadium, auditorium and a library-computer complex.
- 3.E.2-5 Coordinate and promote recreation programs provided by the U.S. Forest Service, State Parks and any other public agencies. An example is China Wall, a cooperative project of the U.S. Forest Service, State of California Green Sticker Fund and the Placer County Department of Public Works.

- 3.E.2-6 Support and coordinate with volunteer groups that assist with providing recreational facilities and programs.

Goal 3.E.3. Encourage and support the development of private recreational opportunities and facilities. Identify and ensure adequate land properly zoned for this use within the community.

Policies

- 3.E.3-1 Encourage the development of private campgrounds and recreational vehicle parks where appropriate.
- 3.E.3-2 Encourage local private enterprise to develop and implement other private recreational facilities and/or programs.

Goal 3.E.4. Develop a system of interconnected hiking, riding and bike trails suitable for active recreation, transportation and circulation from the confluence of the American River to Sugar Pine Reservoir. Trails are a high priority within the Foresthill Community Plan area.

Policies

- 3.E.4-1 Provide trails linking together school facilities, parks, community buildings and other public and commercial areas within and between residential developments.
- 3.E.4-2 Provide links to a major countywide trail system.
- 3.E.4-3 Use public utility corridors such as power line easements, water district easements and other roadways whenever possible when planning and constructing new trails.
- 3.E.4-4 Require proponents of new development to dedicate right-of-way and/or construct segments of trail linking the development to existing and planned trails. Trails could serve as required passive open space (see Placer County Trail Development Policy).
- 3.E.4-5 Trails shall be separated from the traveled roadway whenever possible by curbs, barriers, landscaping and spatial distance. Safety is a high priority, also with emphasis on aesthetics.
- 3.E.4-6 Explore methods of providing off-highway vehicle (OHV) use, particularly to the youth of the community.
- 3.E.4-7 Develop a Trails Master Plan of all trails currently in use in the Plan area, indicating public and private property-dedicated easements. Also identify staging areas -- provide signs and maps.

Goal 3.E.5. Acquire additional open space in the Plan area.

Policies

- 3.E.5-1 The County, or a local recreation district, shall pursue all opportunities for the acquisition of surplus Federal or State lands for recreation.

3.5.3 IMPACT EVALUATION CRITERIA

Based on Appendix G of the CEQA Guidelines, a significant environmental impact would occur if the proposed FDCP would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities.

- Need for new or physically altered park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or park standards.
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreation facilities which might have an adverse physical effect on the environment.
- Be inconsistent with the adopted the *Placer County General Plan* policies and standards.

3.5.4 IMPACTS AND MITIGATION MEASURES

3.5-1 Provision of adequate parks and recreation facilities and programs to both residents of and visitors to the Plan area.

The Plan area already includes large areas of public parks and public open space, including the 35,000-acre Auburn State Recreation Area, Sugar Pine Reservoir, Big Reservoir (Morning Star Reservoir), and Oxbow Recreation Area, all of which accommodate multiple recreational uses. Other public open space owned and/or operated by the U.S. Forest Service, U.S. Bureau of Land Management, and U.S. Bureau of Reclamation are located in close proximity to the Plan area. Organized recreational programs are available through the school districts and in the community of Foresthill. The Plan area also includes an extensive network of trails, and includes policies and implementation measures to expand and provide linkages within the trail network. Construction of the new high school will bring additional athletic facilities and programs to the community.

However, two unimproved, unmaintained park sites are located in the Plan area, and the public swimming pool has substantial deferred maintenance needs. The lack of a stable local funding source to operate and maintain facilities, as well as deferred maintenance costs, are issues that have been raised by the community and the FDCP Team.

The proposed FDCP includes goals and policies to provide recreation facilities and opportunities for the Plan area, and establishes population-based standards for public park acreage and park facilities. The Plan also addresses the issue of funding and local management of facilities. Policy 3.E.1-5 calls for the County to require the inclusion of new subdivisions in a financing district (such as a County Service Area or Landscaping and Lighting District) to generate sufficient funds to operate and maintain new public parks. Policy 3.E.2-3 calls for expanding the powers of the Foresthill P.U.D. or pursuing the creation of a local recreation district to provide public services, administer and generate funds for the acquisition, development and maintenance of parks and recreational programs. It is noted that implementation of this policy is a high priority of the community. Policy 3.E.2-4 encourages expansion of the Joint Powers Agreement between Placer County, the Foresthill Union School District, and a Local Recreation District to provide recreational facilities and programs for the community. The development of private recreational facilities is also encouraged.

Because the proposed FDCP provides for the creation of funding sources to develop and maintain new parks and recreational facilities associated with new development, and because the Plan also includes policies and implementation measures to address existing deficiencies, this impact is considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6 NATURAL RESOURCES/CONSERVATION/OPEN SPACE

3.6.1 INTRODUCTION

This section of the EIR addresses the topics of soils, vegetation, wetlands, fish and wildlife, geology and geologic hazards, topography and slope, paleontology, hydrology and surface flows, water resources, and agricultural/timber resources, under the umbrella of Natural Resources/Conservation/Open Space.

The purpose of the analysis of hydrology and surface flows and water resources is to assess potential impacts that may occur during and after implementation of the FDCP. This section also describes and addresses impacts on water resources proposed to supply the domestic water needs for the Plan area.

The discussion of biological resources is based on implementation of the proposed FDCP. The analysis is based on data collected during field reconnaissance and existing documentation of biological resources in this area. This section addresses the vegetation communities present and the wildlife and plant species occurring, or potentially occurring, in the Plan area, as well as the suitability of habitats in the Plan area to support special-status species and sensitive habitats, including potential jurisdictional waters of the United States. This section also includes a discussion of potentially significant impacts on biological resources and mitigation measures necessary to reduce impacts to a less than significant level.

This section also presents an overview of the geologic and seismic setting of the Plan area. The existing geologic conditions and geologic hazards which may be encountered within the Plan area are evaluated. Potential impacts are identified based on existing characteristics of the soils, geology, and seismicity of the region, and mitigation measures are proposed.

Surveys and analysis of biological resources were completed by Foothill Associates. Analysis of timber resources was conducted by Peregrine Environmental.

3.6.2 SETTING

PURPOSE

The purpose of the Natural Resources/Conservation/Open Space section of the FDCP is to identify existing natural resources which make up the physical environment of the Foresthill Divide Community Plan area, and to develop goals and policies that provide for their preservation, use and enhancement. The Conservation Element is one of the seven mandatory General Plan elements. All of the topics required to be addressed in a Conservation Element by State law are covered in the Placer County General Plan. The Conservation section of the FDCP addresses topics specific to the Plan area, which are of particular interest to residents of the Divide. Conservation of the unique natural resources in the Plan area is an important feature of the FDCP.

The Open Space Element is one of the seven mandatory General Plan elements. All of the topics required to be addressed in an Open Space Element by State law are covered in the Placer County General Plan. The purpose of the Open Space section of the Foresthill Divide Community Plan is to address topics specific to the Plan area, which are of particular interest to residents of the Divide. Open space is a dominant feature of the Plan area, and its preservation is a central feature of the FDCP.

The 109 square mile Foresthill Divide Community Plan area is comprised of many diverse biological communities, including the coniferous forest, montane hardwood, chaparral, blue oak woodland, annual grassland, urban and riparian habitats. Each community has its own geologic associations, soil associations, diversity in topography, and richness in resources. The Plan area is generally forested, providing excellent fish and wildlife habitat, watersheds, timber resources, vegetation, and overall natural beauty. Collectively, the natural resources within the Foresthill Divide are the primary asset of the Plan area, and should be preserved and managed as such. The geology and topography of the area is varied and unique. In addition to soil conditions and types, geology and topography are the most limiting factors to development of the Foresthill Divide. The Plan area generally consists of metavolcanic and metasedimentary rock that is prone to severe erosion and incidents of rockfall. The Plan area is rich in minerals, and continues to be mined primarily for gold and silver. The geology of the Plan area is likely to contain paleontological resources, similar to those in adjacent areas.

The water resources within the Plan area are of exceptional quality and quantity. Surface waters originate in the Sierra Nevada, just above the Plan area, and create the Middle and North Forks of the American River. The North Fork of the American River is designated Wild and Scenic within the Plan area. Groundwater resources have supported individual wells within the Plan area, but are not as plentiful or constant as surface waters.

The Plan area supports a diverse assemblage of plant and wildlife species throughout numerous habitats including coniferous forest, montane hardwood, chaparral, blue oak woodland, annual grassland, urban, ruderal/barren, river/stream, and open water habitats. Nine special-status plant species have the potential to occur within the Plan area. These plants are afforded special protection in the California environmental review process, and are considered sensitive local

resources in Placer County. Habitats supporting conditions suitable for these species should be considered sensitive, and as such should be surveyed prior to project development. If some or all of these species are found in areas proposed for development, the appropriate resource agencies should be contacted, and if possible those areas should be avoided.

Special-status avian species may utilize the Plan area for foraging and nesting habitat. The nests of raptors, as well as the nests of migratory bird species, are protected under the Migratory Bird Treaty Act (MBTA). Active raptor nests are also afforded additional protection in the California Fish and Game Code, §3503.5. Proposed development within areas supporting suitable nesting habitat for any or all of these species must be surveyed prior to construction to determine the presence or absence of these species nesting within the site. If any or all of these species are found actively nesting within an area proposed for development, no construction activities may occur within 500 feet of the nest location. Construction activities may resume within this buffer zone after the young have fledged from the nest and the nest is abandoned for that breeding season.

Several special-status mammal species have the potential to occur within the Plan area. These species may utilize the Plan area for shelter, foraging, and breeding habitat. Because these species are sensitive to federal, state, and/or local resource agencies, focused surveys for these species should be conducted prior to the approval of any project that may remove or fragment suitable habitats for these species. If any or all of these species are observed during the focused surveys, or if evidence of these species is found within the survey area, the appropriate resource agency should be contacted, and effective management strategies should be developed to protect these species and their associated habitats.

Numerous special-status amphibian species could utilize the rivers, streams, and/or open water habitats throughout the Plan area. Others may utilize annual grassland habitat with adjacent seasonal wetlands and habitats supporting suitable soil conditions throughout the Plan area. The status of these species is of concern to federal, state, and/or local resource agencies. Consequently, prior to approval of projects proposing to affect suitable habitat for these species, a focused survey should be conducted to determine the presence/absence of these species within the project area. If one or any of these species is found within the survey area, the appropriate resource agency should be contacted, and species-specific management strategies should be developed to ensure the protection of the species and their associated habitat.

Three special-status invertebrate species have the potential to occur within the Plan area. The spiny rhyacophilan caddisfly is known from one stream within the Plan area, and may occupy additional streams and rivers in reaches supporting cool flowing water conditions. Projects having the potential to affect the water quality of these water features could affect this species. Consequently, surveys for this species should be conducted prior to the approval of projects that may affect water quality in the Plan area. If this species is found within the Plan area, measures should be taken, in consultation with the USFWS, to ensure that water quality is not altered in a manner that would adversely affect this species.

Yates' snail could potentially occur on limestone outcroppings or in caves within the Plan area. Prior to the approval of proposed projects within the Plan area, a survey should be conducted to

determine if suitable habitat for this species occurs within the project site. If suitable habitat is found, a focused survey for this species should be conducted to determine the presence/absence of this species in the project area. If this species is determined to occur onsite, and the proposed development cannot avoid these areas, consultation with the USFWS would be required to determine appropriate conservation/management strategies for this species.

To date, no known occurrences of Valley elderberry longhorn beetle are recorded within the Foresthill Divide vicinity, and no known focused surveys for elderberry shrubs have been conducted within the Plan area. Prior to approval of a proposed project within the Plan area, a focused survey for elderberry shrubs should be conducted to determine the presence/absence of shrubs on the project site. If the shrubs are found, these locations should be avoided. If shrubs cannot be avoided, consultation with the USFWS will be required to determine appropriate mitigation strategies.

Jurisdictional waters of the U.S. occur in the Plan area. Several streams, ponds, and intermittent drainages are also located within the Plan area boundary. These water features have not been delineated, and additional jurisdictional wetlands or waters of the U.S. may occur within the Plan area. Encroachment into areas protected under Corps jurisdiction will require authorization from the Corps, and may require Regional Water Quality Control Board (RWQCB) water quality certification and a CDFG Streambed Alteration Agreement.

Wildlife movement corridors are essential to the distribution of wildlife, providing a means of movement throughout ranges that are encroached by human disturbances. Because a majority of the habitats within the Foresthill Divide is relatively undisturbed, these areas provide a means for wildlife movement throughout the Plan area. Further development within these areas will fragment this habitat, and may result in obstructing this movement corridor. The effect on deer migration and wildlife movement should be analyzed prior to the approval of any proposed development project within the Plan area. The analysis should include consultation with the CDFG and local resource agencies to properly evaluate the current wildlife movement and deer migration patterns in the Plan area.

Riparian habitats support numerous plant and wildlife species and are considered a sensitive habitat in provisions of the Placer County General Plan and the FDCP. Projects that propose encroachment into these areas must follow the guidelines established in the Placer County General Plan, and may require a Streambed Alteration Agreement with the CDFG.

While agriculture and timber were once dominant forces in the Placer County economy and way of life, their relative importance has diminished in monetary terms. Other areas with better climate conditions for agriculture, as well as residential development of areas once used for farms, have contributed to the decline in commercial agriculture in the Plan area. However, both agricultural and timber resources remain important in terms of the history and current culture of the Foresthill Divide Community Plan area, as well as providing open space and contributing to the scenic qualities of the Plan area.

DISCUSSION

Topics addressed in this discussion of natural resources include soils, vegetation, geology, topography and slope, paleontology, hydrology and surface flows, water resources, fish and wildlife, agricultural/timber resources, and geologic hazards.

Soils

Soils mapping of the Foresthill area was completed in 1980 by the Natural Resources Conservation Service. Soils found on the Foresthill Divide are widely varied, depending upon a combination of environmental factors, including underlying rocks, climatic conditions, topography, type of native vegetation, and the development stage of the soil. The primary soil groups on the Foresthill Divide are Aiken loam and Aiken cobbly loam, Cohasset loam, Mariposa complex, Mariposa-Josephine complex, Maymen-rock outcrop complex and Sites loam.

The Aiken loam, Aiken cobbly loam, and Cohasset loam are deep, well drained soils that form in residuum on volcanic ridges, between elevations of 2000 to 4000 feet. The Sites soil is formed in residuum from metasedimentary and metabasic rock. Permeability is moderately slow. The Cohasset and Sites soils are particularly well suited for timber production, as indicated by the Ponderosa Pine.

The Mariposa-Josephine complex is encountered between 1500 and 4000 feet in elevation. Mariposa is common to the ridges and south and west-facing slopes, while Josephine is common to the north and east-facing slopes. The complex is well-drained with moderately slow permeability, and moderate to high erosion hazard.

The Maymen-Rock outcrop complex occurs in the Plan area from 1200 to 3500 feet in elevation, and generally consists of 50 percent Maymen soil, 20 percent Rock outcrop, and 25 percent Mariposa gravelly loam. The Maymen is a shallow, gravelly loam that is somewhat excessively drained, and permeability is moderate. Timber production and residential development is limited on the complex due to the slope, shallowness, and rock outcroppings.

Physical and chemical properties of soils may limit construction-related uses of these soils. According to the Placer County General Plan Background Report, construction can be limited due to erosion hazards, hydrologic groups' shrink-swell potential, and risk of corrosion to concrete and uncoated steel.

The California Department of Conservation has instituted the Farmland Mapping and Monitoring Program (FMMP) which produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status. Current land use information is gathered using aerial photographs, a computer mapping system, public review, and field reconnaissance. FMMP identifies four categories of Important Farmlands: Prime Farmlands, Farmlands of Statewide Importance, Unique Farmlands, and Farmlands of Local Importance. The California Department of Conservation (CDC) defines these four categories as follows:

- **Prime Farmland** is land which has the best combination of physical and chemical features, and is able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance** is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
- **Unique Farmland** consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance** is considered of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

As shown in Table 3.6-1, soil units that meet the criteria for Prime Farmland and Farmland of Statewide Importance (as identified in the U.S. Department of Agriculture's Land Inventory and Monitoring Project) occur within the Plan area. These farmlands are located primarily at the top of the Foresthill Divide, along the Foresthill Road Corridor.

Table 3.6-1
Farmland Soils of Placer County

Symbol	Name	Prime Farmland	Statewide Importance	Occurring
100	Aiken loam, 2 to 9% slopes	X		X
101	Aiken loam, 9 to 15% slopes		X	X
105	Alamo variant clay, 2 to 15% slopes		X	
106	Andregg coarse sandy loam, 2 to 9% slopes		X	
107	Andregg coarse sandy loam, 9 to 15% slopes		X	
109	Andregg coarse sandy loam, rocky, 2 to 15% slopes		X	
122	Boomer loam, 2 to 15% slopes		X	X
134	Cohasset loam, 2 to 9% slopes	X		X
135	Cohasset loam, 9 to 15% slopes		X	X
140	Cometa sandy loam, 1 to 15% slopes		X	
142	Cometa-Ramona sandy loams, 1 to 15% slopes		X	
149	Horseshoe gravelly loam, 2 to 9% slopes	X		
157	Josephine loam, 2 to 9% slopes	X		
158	Josephine loam, 9 to 15% slopes		X	X
162	Kilaga loam	X		
174	Ramona sandy loam, 0 to 2% slopes	X		
175	Ramona sandy loam, 2 to 9% slopes	X		
183	Sierra sandy loam, 2 to 9% slopes	X		
186	Sites loam, 2 to 9% slopes	X		X
191	Sobrante silt loam, 2 to 15% slopes		X	

Symbol	Name	Prime Farmland	Statewide Importance	Occurring
192	Xerofluvents, sandy		X	
193	Xerofluvents, occasionally flooded	X		
195	Xerofluvents, hardpan substratum		X	

Source: U.S. Department of Agriculture Natural Resources Conservation Service.

The majority of the Plan area is characterized as having moderate to severe shallow soil areas. However, there are many areas with deeper soils that can be identified as suitable for development on septic systems. The northeastern- and southeastern-most portion of the Plan area are not designated as shallow soil areas. These lands are federally owned lands used primarily for timber production. Developed areas along Foresthill Road have moderately shallow soils, and the remaining soils on the Divide are considered severely shallow.

Vegetation

Predominant habitats comprising the Foresthill Divide Community Plan area include coniferous forest, montane hardwood, chaparral, blue oak woodland, annual grassland, urban, ruderal/barren, river/stream, and open water (ponds, reservoirs, etc). Land uses in the Foresthill Divide region include low density residential and commercial. A majority of the Plan area is undeveloped. The habitats are mapped in Figures IV-1 and IV-2 of the FDCP, and the dominant vegetation species associated with these habitats are described below.

Coniferous Forest

Coniferous forest represents the dominant vegetation community found within the Foresthill Divide Community Plan area. This habitat is comprised of three major vegetation associations: Jeffrey pine, Ponderosa pine, and Sierran mixed conifer. Jeffrey pine and Ponderosa pine associations are predominantly comprised of pure stands of Jeffrey pine (*Pinus jeffreyi*) and Ponderosa pine (*Pinus ponderosa*), respectively. Sierran mixed coniferous forest associations support these species, in addition to madrone (*Arbutus menziesii*), douglas fir (*Pseudotsuga menziesii*), and black oak (*Quercus kelloggii*). Understories within coniferous forest habitats vary. Jeffrey pine and Ponderosa pine associations support sparse understory growth, dominated by mountain misery (*Chamaebatis foliolosa*). Conversely, Sierran mixed conifer canopies support a diverse assemblage of plant species, including snowberry (*Symphoricarpos mollis*), mule ears (*Wyethia mollis*), mountain pride (*Penstemon newberryi*), poison oak (*Toxicodendron diversilobum*), and mountain misery.

Montane Hardwood

Montane hardwood habitats are widespread throughout the Plan area. This vegetation type is divided into two vegetation associations: montane hardwood and montane hardwood-conifer. Dominant trees found in these associations include blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), madrone, and black oak. Pines, including Foothill pine (*Pinus sabiniana*) and Ponderosa pine are also found in the montane hardwood-conifer associations. Numerous species of shrubs and herbaceous species are associated with montane hardwood habitats. Such species include ceanothus (*Ceanothus* spp.), poison oak, manzanita

(*Arctostaphylos* spp.), wild oats (*Avena* sp.), silk tassel bush (*Garrya* sp.), mules ears (*Wyethia angustifolia*), farewell-to-spring (*Clarkia purpurea*), brodiaea (*Brodiaea* sp.), and horsetail (*Equisetum arvense*). Additional understory species include rose clover (*Trifolium hirtum*), Italian ryegrass (*Lolium multiflorum*), coyotebrush (*Baccharis pilularis*), and dogtail (*Cynosurus echinatus*).

Chaparral

Three vegetation associations, chamise-redshank chaparral, montane chaparral, and mixed chaparral, are found in the chaparral habitats within the Plan area. Chaparral habitat is characterized predominantly by shrubs such as manzanita (*Arctostaphylos viscida* ssp. *viscida*), chamise (*Adenostoma fasciculatum*), coffeeberry (*Thamnus californica*), red shank (*Adenostoma sparsifolium*), and toyon (*Heteromeles arbutifolia*). However, herbaceous species including coyotebrush, cudweed (*Gnaphalium* sp.), and St. John's wort (*Hypericum* sp.) also occur here.

Blue Oak Woodland

Blue oak woodland is interspersed throughout the Plan area. This habitat consists of a relatively open canopy dominated by blue oak. However, scattered foothill pines are also associated with this habitat in several locations within the Plan area. The understory supports numerous non-native grasses and forbs, including brodiaea, yellow star thistle, soft chess (*Bromus hordeaceus*), wild oats, and ripgut grass (*Bromus diandrus*).

Annual Grassland

Annual grassland habitats support relatively low plant diversity and are dominated by non-native grasses and other herbaceous species. Dominants include dogtail, soft chess, wild oat, Italian ryegrass, rose clover, St. John's wort, and yellow star thistle. In several locations throughout the Plan area, the annual grassland habitat supports seasonal wetland vegetation, including cattails (*Typha latifolia*) and curly dock (*Rumex crispus*). This vegetation is found predominantly in areas supporting hydric soil conditions and/or seasonal water flow.

Urban

Minimal vegetation is associated with the urban portions of the Plan area. Typically, non-native plants are incorporated into the landscape design of commercial and residential parcels. Plant species commonly found in urban habitats include lily of the Nile (*Agapanthus africanus*), Italian cypress (*Cupressus sempervirens*), and sweet gum (*Liquidambar styraciflua*).

Ruderal/Barren

Ruderal/barren habitats within the Plan area consist of gravel substrate and are nearly devoid of vegetation. This habitat is highly disturbed and provides marginal plant habitat. Sparse vegetation, dominated by invasive non-native species, occurs in some areas within this habitat.

River/Stream

River and stream habitats are open water features, and consequently support relatively sparse vegetation. However, throughout the Plan area, riparian vegetation grows adjacent to these habitats. The associated riparian vegetation is dominated by plant species that have adapted to the wet soil conditions found along stream margins. Riparian vegetation located within the Plan area includes willow (*Salix* sp.), madrone, California wild grape (*Vitis californica*), Himalayan blackberry (*Rubus discolor*), and wild cucumber (*Marah* sp.).

Open Water

Sugar Pine Reservoir and Big Reservoir are used for water storage and recreation, and also provide valuable habitat for wildlife. Vegetation within these habitats is relatively sparse, and consists predominantly of scrub and emergent vegetation around reservoir margins.

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under the California Environmental Quality Act (CEQA), Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific local objectives and policies listed in the Placer County and Foresthill General Plans. Sensitive habitats within the Foresthill Divide Community Plan area include potential jurisdictional waters of the United States, wildlife movement corridors, and riparian habitats. These habitats are discussed below.

Jurisdictional Waters of the United States

The U. S. Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). “Discharge of fill material” is defined as the addition of fill material into waters of the U.S., including, but not limited to, the following: placement of fill that is necessary for the construction of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 CFR § 328.2(f)]. In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways, depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 CFR §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.

- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 CFR §328.4(c)(1)]. The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 CFR §328.3(e)].

Jurisdictional waters of the U.S. within the Plan area include the Middle and North Forks of the American River and associated tributaries, Sugar Pine Reservoir, and Big Reservoir. Additional streams, ponds, and intermittent drainages within the Plan area are potential jurisdictional waters of the U.S. Additional water features deemed jurisdictional by the Corps, such as wetlands, ponds, or intermittent drainages, may occur within the Plan area; an official Corps delineation of features within the Plan area would result in the identification of such features.

Wildlife Movement Corridors

Wildlife movement corridors are established routes for wildlife and are essential to the distribution of species populations. As a result, wildlife movement corridors are considered a sensitive habitat by the California Department of Fish and Game (CDFG). Often, these corridors occur in meadow or riverine habitats, providing a clear route for movement in addition to supporting ample food sources and shelter. Movement corridors may also consist of a region of undisturbed open space that connects two larger parcels of undisturbed land. A majority of the habitats within the Plan area is not developed and provides a means of movement and migration through the area. Further development of the Plan area will diminish the quality of these movement corridors and will ultimately restrict wildlife movement throughout the Foresthill Divide region.

Riparian Habitat

Riparian habitats support a diverse assemblage of plant species and provide shelter, foraging, and breeding habitat for numerous species of wildlife. Riparian habitats, associated with streams and intermittent drainages, are interspersed throughout the Plan area. Riparian habitats are not afforded special protection under federal law; however, these habitats are considered special resources in Placer County and are protected under the Placer County General Plan and the Foresthill Divide Community Plan. Additionally, the continued decline of riparian habitats is of concern to the CDFG and CNPS.

Riparian corridors occur in development areas. Five development areas were reviewed, including Foresthill, Todd’s Valley, Baker Ranch, Yankee Jim’s and Michigan Bluff. Development areas are illustrated on Figures IV-3 and IV-4 of the FDCP. A review of topographic maps and aeriels indicate riparian corridors occurring within potential development areas that include Todd’s Creek, Gas Canyon, Big Snyder Gulch, Slug Gulch, Peach Stone

Gulch, Devil's Canyon, and North Branch Owl Creek. Streams and riparian corridors located outside development areas may also be affected by development.

Biological Value of Habitats

The value of the jurisdictional waters of the U.S., wildlife movement corridors, and riparian habitat is illustrated in Figures 3.6-1 and 3.6-2. These resources have been categorized into high, medium, and low to illustrate the significance of future impacts. This rating system illustrates the relative importance of the sensitive habitats in the Plan area. Jeffrey and Ponderosa Pine, Sierran Mixed Conifer, and streams/waterbodies all have high biological value, mainly due to the number of potentially occurring special-status species, which exceeds ten. Medium biological value was given to Montane Hardwoods and Chaparral, Blue Oak Woodland, and Mixed Chaparral. These areas have between six and ten potentially occurring special-status species. Areas with low biological value include urban, annual grassland, and ruderal/barren land. These areas typically have between one and five potentially occurring special-status species. The Plan area is rich in biological resources, and riparian corridors are found throughout the entire Plan area. As a result, a significant portion of the Plan area has a high value.

Cumulative Effects on Common Species

The Foresthill Divide Community Plan area supports habitat for numerous common resident and migratory wildlife species (e.g., California ground squirrel, raccoon, opossum, blacktail jackrabbit, black bear). The continuous expansion of urban development encroaches into habitats utilized by these species. Although efforts to minimize encroachment into currently undisturbed habitats are encouraged, these common species are not formally protected under the federal or state Endangered Species Acts.

Special-Status Plant Species

Special-status plant species are species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as:

- Listed or proposed for listing under the State or federal Endangered Species Acts;
- Protected under other regulations (e.g., local policies);
- California Department of Fish and Game (CDFG) Species of Special Concern;
- Listed as species of concern by the California Native Plant Society (CNPS), or
- Otherwise receive consideration during environmental review (CEQA)

Federal Endangered Species Act/California Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA), in 1984. The State and federal Endangered Species Acts are intended to operate in conjunction with CEQA and the

National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The U.S. Fish and Wildlife Service (USFWS) is responsible for implementation of the FESA, while the CDFG implements the CESA. During review of development projects, each agency is given the opportunity to comment on the potential of the projects to affect listed plants and animals.

Species of Special Concern

In addition to formal listing under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern” developed by the CDFG. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

California Native Plant Society Listings

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

- List 1A: Plants Believed Extinct
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- List 3: Plants About Which We Need More Information – A Review List
- List 4: Plants of Limited Distribution – A Watch List

Special-Status Plant Species Presence in the Community Plan Area

Table 3.6-2 identifies the plant species listed in the USFWS species list for the Auburn, Colfax, Dutch Flat, Foresthill, Georgetown, Greenwood, Michigan Bluff, and Westville 7.5-minute USGS quadrangles, all of which have once occurred in the vicinity of the Plan area. Additionally, plant species listed in the California Natural Diversity Data Base (CNDDB) as occurring within a radius taken five miles from the northeast and southwest corners of the Plan area (referred to as the 5-mile radius) are included in Table 3.6-2. Species listed as having no potential for occurrence are species either not expected to occur within the Plan area based on the known range of the species, or not expected to occur due to lack of suitable habitat within the Plan area. Listed and special-status plant species that are known to occur, or may potentially occur, within the Plan area are listed in Table 3.6-3 and described below. The plant species described below were considered for this analysis based on field surveys and review of the CNDDB database, USFWS species lists for the Placer County vicinity, CNPS literature, and existing documentation for the Foresthill Divide vicinity.

Listed and Special-Status Plants

The CNDDDB lists eleven special-status plant species as occurring within the 5-mile radius of the Plan area. However, based on literature review, soil analysis, and species range information, it was determined that suitable habitat for only nine species occurs within the Plan area. These species include Butte County fritillary (*Fritillaria eastwoodiae*), Layne's ragwort (*Senecio layneae*), nissenan manzanita (*Arctostaphylos nissenana*), Stebbins's phacelia (*Phacelia stebbinsii*), saw-toothed lewisia (*Lewisia serrata*), woolly violet (*Viola tomentosa*), Red Hills soaproot (*Chlorogalum grandiflorum*), Pine Hill flannelbush (*Fremontodendron decumbens*), and Stebbins's morning glory (*Calystegia stebbinsii*). Additionally, four of these species (Layne's ragwort, nissenan manzanita, saw-toothed lewisia, and Stebbins's phacelia) are also listed in the USFWS species list for the Foresthill Divide vicinity. Discussed below are the special-status plant species that have the potential to occur within the Plan area.

Butte County fritillary. Butte County fritillary is a federal species of concern and is listed with the CNPS as a 1B species. Butte County fritillary occurs in cismontane woodlands, chaparral, and lower montane coniferous forests on serpentinite, red clay, and sandy loam soils. This species is found in elevations ranging from 130 to 4,900 feet above mean sea level (MSL). One record of this species occurs south of Sugar Pine Reservoir on the northwestern boundary of the Plan area. Suitable soil conditions for this species are present within the Plan area. Potential habitat for this species occurs within the chaparral, montane hardwood, blue oak woodland, and coniferous forest habitats in the Plan area, and consequently this species may occupy these habitats.

Layne's ragwort. Layne's ragwort is listed federally threatened, listed rare in California, and is considered a 1B species with the CNPS. This species occupies chaparral and cismontane woodland habitats within ultramafic soils. Layne's ragwort is known from elevations ranging between 650 to 3,200 feet above MSL. Six records of this species are listed with the CNDDDB within the 5-mile radius of the Plan area, in El Dorado County. The chaparral and blue oak woodland habitats within the Plan area support suitable habitat for this species. As a result, this species may occupy these habitats within the Plan area.

Nissenan manzanita. Nissenan manzanita is a species of concern to the federal resource agencies and is listed with the CNPS as a 1B species. This species occurs in elevations ranging from 1,400 to 3,600 feet above MSL in closed-cone coniferous forest and chaparral habitats. The CNDDDB lists four records of this species within the 5-mile radius of the Plan area, in El Dorado County. Suitable habitat for this species exists in the chaparral and coniferous forest habitats within the Plan area; consequently, this species could occupy these habitats.

Stebbins's phacelia. Stebbins's phacelia is a species of concern to federal resource agencies and is listed with the CNPS as a 1B species. Stebbins's phacelia occurs on metamorphic rock outcrops in a variety of habitats including lower montane coniferous forest, cismontane woodland, and riparian woodland. This species occurs in elevations ranging from 1,900 to 6,700 feet above MSL. The CNDDDB lists 28 records of this species within the 5-mile radius of the Plan area in Placer and El Dorado counties. Because potential habitat for this species exists within the Plan area, this species may occur here.

Saw-toothed lewisia. Saw-toothed lewisia is a federal species of concern and is listed with the CNPS as a 1B species. This species occurs on metamorphic rock cliffs in broadleafed upland forest, lower montane coniferous forest, and riparian forest habitats in elevations ranging from 2,900 to 4,700 feet above MSL. Saw-toothed lewisia is only known in California from El Dorado and Placer counties. One record of this species is listed with the CNDDDB within the 5-mile radius of the Plan area. Suitable habitat for this species occurs onsite, and this species could occur within the Plan area.

Table 3.6-2 Listed and Special-Status Species Potentially Occurring Within the Plan Area or Vicinity

Scientific Name	Common Name	Regulatory Status (Federal, State, CNPS)	Potential for Occurrence
Plants			
Butte County fritillary	<i>Fritillaria eastwoodiae</i>	SC; --; 1B	YES
Layne's ragwort	<i>Senecio layneae</i>	FT;CR;1B	YES
Nissenan manzanita	<i>Arctostaphylos nissenana</i>	SC; --; 1B	YES
Pine Hill flannelbush	<i>Fremontodendron californicum ssp. Decumbens</i>	FE;CR;1B	YES
Red Hills soaproot	<i>Chlorogalum grandiflorum</i>	SC;--;1B	YES
Red-anthered rush	<i>Juncus marginatus var. marginatus</i>	--; --; 2	NO (planning area is outside the known range for this species)
Saw-toothed lewisia	<i>Lewisia serrata</i>	SC; --; 1B	YES
Scadden Flat checkerbloom	<i>Sidalcea stipularis</i>	SC; CE; 1B	NO (planning area is outside the known range for this species)
Stebbins' morning glory	<i>Calystegia stebbinsii</i>	FE; CE;1B	YES
Stebbins' phacelia	<i>Phacelia stebbinsii</i>	SC; --; 1B	YES
Woolly violet	<i>Viola tomentosa</i>	--; --; 1B	YES
Wildlife			
Invertebrates			
Sagehen Creek goracean caddisfly	<i>Goeracea oregona</i>	SC; --; --	*
Shirrtail Creek stonefly	<i>Megaleuctra sierra</i>	SC; --; --	*
South Forks ground beetle	<i>Nebria darlingtoni</i>	SC;--;--	*
Spiny rhyacophilan caddisfly	<i>Rhyacophila spinata</i>	SC; --; --	YES
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT;--;--	YES
Yates' snail	<i>Ammonitella yatesi</i>	SC; --; --	YES
Amphibians/Reptiles			
California horned lizard	<i>Phrynosoma coronatum frontale</i>	SC; CSC (Protected);--; --	YES
California red-legged frog	<i>Rana aurora draytonii</i>	FT; CSC (Protected);--; --	YES
Foothill Yellow-Legged Frog	<i>Rana boylei</i>	SC; CSC (Protected); --	YES
Mount Lyell Salamander	<i>Hydromantes platycephalus</i>	SC; CSC (Protected); --	NO
Mountain yellow-legged frog	<i>Rana muscosa</i>	SC; CSC (Protected); --	YES
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	SC; CSC (Protected);--; --	YES
Western spadefoot toad	<i>Scaphiopus hammondi</i>	SC; CSC (Protected);--; --	YES
Fish**			
Central Valley fall/late fall-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	C; CSC;--	NO

Scientific Name	Common Name	Regulatory Status (Federal, State, CNPS)	Potential for Occurrence
Plants			
Central Valley spring-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	FT (PX); CT;--	NO
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	FT;--;--	NO
Delta smelt	<i>Hypomesus transpacificus</i>	FT; CT;--	NO
Green sturgeon	<i>Acipenser medirostris</i>	SC; CSC;--	NO
Longfin smelt	<i>Spirinchus thaleichthys</i>	SC; CSC;--	NO
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	FT; CSC;--	NO
Winter-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	FE; CE;--	NO
Birds			
American peregrine falcon	<i>Falco peregrinus anatum</i>	D; CE;--	YES
Bald eagle	<i>Haliaeetus leucocephalus</i>	FT; CE;--	YES
Bank swallow	<i>Riparia riparia</i>	--;CT;--	NO
Black swift	<i>Cypseloides niger</i>	SC (MNBMC); --; --	YES
California spotted owl	<i>Strix occidentalis occidentalis</i>	SC (MNBMC); CSC; --	YES
Little willow flycatcher	<i>Empidonax traillii brewsteri</i>	--;CSC;--	NO
Northern goshawk	<i>Accipiter gentillis</i>	SC (MNBMC); CSC (sensitive); --	YES
Tricolored blackbird	<i>Agelaius tricolor</i>	SC; CSC;--	YES
Western burrowing owl	<i>Athene cunicularia hypugea</i>	SC;CSC;--	YES
White-faced ibis	<i>Plegadis chihi</i>	SC;CSC;--	NO
Mammals			
Fringed myotis bat	<i>Myotis thysanodes</i>	SC;--;--	YES
Greater western mastiff bat	<i>Eumops perotis californicus</i>	SC; CSC;--	YES
Long-eared myotis bat	<i>Myotis evotis</i>	SC;--;--	YES
Long-legged myotis bat	<i>Myotis volans</i>	SC;--;--	YES
Pacific fisher	<i>Martes pennanti pacifica</i>	SC; CSC (full species); --	YES
Pine marten	<i>Martes americana</i>	SC; --; --	YES
San Joaquin pocket mouse	<i>Perognathus inornatus</i>	SC;--;--	NO
Sierra Nevada red fox	<i>Vulpes vulpes necator</i>	SC; CT; --	YES
Sierra Nevada snowshoe hare	<i>Lepus americanus tahoensis</i>	SC; CSC; --	YES
Small-footed myotis bat	<i>Myotis ciliolabrum</i>	SC;--;--	YES
Spotted bat	<i>Euderma maculatum</i>	SC; CSC;--	YES
Yuma myotis bat	<i>Myotis yumanensis</i>	SC; CSC;--	YES

FE = federal endangered FT = federal threatened SC = federal species of concern D = delisted PX = critical habitat

C = candidate for listing MNBMC = Migratory Nongame Birds of Management Concern

CE = state endangered CT = state threatened CR = state rare CSC = California species of special concern

1B = CNPS list plants rare, threatened, or endangered in California or elsewhere 2 = CNPS lists plants rare, threatened, or endangered in California, but more numerous elsewhere

*Not enough information is available to accurately address the potential for this species to occur within the planning.

** Information pertaining to anadromous fishes based on communication with the CDFG.¹⁹

Source: Foothill Associates, 2000.

Table 3.6-3 Listed and Special-Status Species Potentially Occurring Within the Plan Area or Vicinity

Common Name	Scientific Name	Habitat Requirements	Potential for Occurrence
<u>Plants</u>			
Butte County fritillary	<i>Fritillaria eastwoodiae</i>	Chaparral, cismontane woodland, and lower montane coniferous forest habitats.	Species could occur in suitable habitats within the planning area.
Layne's ragwort	<i>Senecio layneae</i>	Chaparral and cismontane woodland habitats on serpentinite or gabbroic soil conditions	Suitable habitats occur within the planning area.
Nissenan manzanita	<i>Arctostaphylos nissenana</i>	Closed cone coniferous forest and chaparral habitats	Suitable habitats occur within the planning area.
Stebbins's phacelia	<i>Phacelia stebbinsii</i>	Cismontane woodland, lower coniferous forest, and meadow habitats	Suitable habitats occur within the planning area.
Saw-toothed lewisia	<i>Lewisia serrata</i>	Lower coniferous forest, broadleafed upland forest, and riparian forest habitats	Suitable habitats occur within the planning area.
Woolly violet	<i>Viola tomentosa</i>	Lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest habitats on gravelly soil conditions	Suitable habitats occur within the planning area.
Red hills soaproot	<i>Chlorogalum grandiflorum</i>	Cismontane woodland, chaparral, and lower montane coniferous forest habitats on serpentinite or gabbroic soil conditions	Suitable habitats occur within the planning area.
Pine Hill flannelbush	<i>Fremontodendron decumbens</i>	Chaparral and cismontane habitats on gabbroic or serpentinite soil conditions	Species could occur in suitable habitats within the planning area.
Stebbins's morning-glory	<i>Calystegia stebbinsii</i>	Open chaparral and cismontane woodland habitats on serpentinite or gabbroic soil conditions	Species could occur in suitable habitats within the planning area.
<u>Wildlife</u>			
<u>Invertebrates</u>			
Yates' snail	<i>Ammonitella yatesi</i>	Limestone caves and outcroppings, typically on northfacing slopes	Species could occur in suitable habitats within the planning area.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Elderberry shrubs (host plant)	No shrubs found onsite during field reconnaissance; however, elderberry shrubs may occur within the planning area.
Spiny rhyacophilan caddisfly	<i>Rhyacophila spinata</i>	Cool, running water	Species could occur in the streams within the planning area.
<u>Amphibians</u>			
California red-legged frog	<i>Rana aurora draytonii</i>	Requires slow moving streams, ponds, or marsh habitat with emergent vegetation	Species could occur in and along the streams and open water within the planning area.

Common Name	Scientific Name	Habitat Requirements	Potential for Occurrence
Mountain yellow-legged frog	<i>Rana muscosa</i>	Lakes, streams, and ponds in elevations ranging from 1,370 to 3,650 meters in the Sierra Nevada	Species could occur in the streams and open water habitats within the planning area.
California horned lizard	<i>Phrynosoma coronatum frontale</i>	Requires friable soils; occupies a wide variety of habitats	Species may be associated with friable soils in chaparral, montane hardwood, blue oak woodland, annual grassland, barren, or coniferous forest habitats within the planning area.
Foothill yellow-legged frog	<i>Rana boylei</i>	Requires shallow flowing water supporting cobble sized substrate	Species could occur within the streams located within the planning area.
Western spadefoot toad	<i>Scaphiopus hammondi</i>	Require shallow temporary pools with adjacent grassland habitat	Species could occur in seasonal wetlands associated with annual grassland habitats within the planning area.
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	Requires permanent water source with nearby basking sites	Species could occur along slower reaches of streams within the planning area or in the open water habitats onsite.
Birds			
Northern goshawk	<i>Accipiter gentilis</i>	Middle to high elevation mixed coniferous forest habitats	Species could forage and nest in woodlands, montane hardwood, and coniferous forest habitats within the planning area.
Western burrowing owl	<i>Athene cunicularia hypugea</i>	Open grassland habitat; often nests in abandoned ground squirrel burrows within grasslands	Potential habitat for this species occurs in the annual grassland habitats within the planning area.
American peregrine falcon	<i>Falco peregrinus anatum</i>	Nests in a wide variety of habitats including woodlands, dense coniferous forests, and coastal habitats	Species could forage and nest in woodlands, montane hardwood, and coniferous forest habitats within the planning area.
Black swift	<i>Cypseloides niger</i>	Nests on cliffs in the central and southern Sierra Nevada; also known from coastal Santa Cruz and Monterey Counties and the San Bernardino and San Jacinto mountains	Species could occur in suitable habitats within the planning area.
California spotted owl	<i>Strix occidentalis occidentalis</i>	Old growth forests with multiple layered canopies; associated with mixed coniferous, redwood, and Douglas fir forest habitats	Species could forage and nest in the mixed coniferous forest and montane hardwood habitats within the planning area.
Bald eagle	<i>Haliaeetus leucocephalus</i>	Nests in the northernmost counties of California within dense conifer stands and woodlands	Suitable wintering habitat for this species occurs in the montane hardwood and coniferous forest habitats within the planning area.

Common Name	Scientific Name	Habitat Requirements	Potential for Occurrence
Tricolored blackbird	<i>Agelaius tricolor</i>	Nests in emergent wetlands in dense cattails, blackberry, and willows throughout the Central Valley and California coast	This species could occur in seasonal wetlands within the annual grassland habitats in the planning area.
Mammals			
Greater western mastiff bat	<i>Eumops perotis californicus</i>	Occurs in open coniferous forests, deciduous woodlands, annual grassland, chaparral, and scrub habitats	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Spotted bat	<i>Euderma maculatum</i>	Occurs in wide variety of habitats including arid deserts, grasslands, mixed coniferous forests; roosts in rock crevices, cliffs, caves	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Sierra Nevada snowshoe hare	<i>Lepus americanus tahoensis</i>	Found only in the Sierra Nevada in mixed conifer, subalpine conifer, red fir, Jeffrey pine, lodgepole pine, and aspen forests	Potential habitat for this species occurs in the coniferous forest and montane hardwood habitats within the planning area.
Small-footed myotis bat	<i>Myotis ciliolabrum</i>	Occurs in a wide variety of habitats; roosts in caves, crevices, and buildings	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Long-eared myotis bat	<i>Myotis evotis</i>	Woodland and forest habitats; known to roost in rock crevices, under bark, and tree snags	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Fringed myotis bat	<i>Myotis thysanodes</i>	Known to roost in caves, mines, and rock crevices within a variety of habitats	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Long-legged myotis bat	<i>Myotis volans</i>	Occurs in woodlands and forest habitats generally over 4,000 feet; roosts in rock crevices, under bark, in tree snags, and cliffs	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.

Common Name	Scientific Name	Habitat Requirements	Potential for Occurrence
Yuma myotis bat	<i>Myotis yumanensis</i>	Occurs in a wide variety of habitats; roosts in caves and rock crevices	Potential habitat for this species occurs in the blue oak woodland, coniferous forest, annual grassland, chaparral, and montane hardwood habitats within the planning area.
Sierra Nevada red fox	<i>Vulpes vulpes necator</i>	Lodgepole pine, mixed conifer, montane riparian, and ponderosa pine forests within the Sierra Nevada	Potential habitat for this species occurs in the coniferous forest and montane hardwood habitats within the planning area.
Pacific fisher	<i>Martes pennanti pacifica</i>	Dense, closed canopy coniferous forests and riparian habitats in the Sierra Nevada, Cascades, and Klamath Mountains	Potential habitat for this species occurs in the coniferous forest and montane hardwood habitats within the planning area.
Pine marten	<i>Martes americana</i>	Various habitats along the north coast and within the Sierra Nevada, Klamath, and Cascades mountain ranges	Potential habitat for this species occurs in the coniferous forest and montane hardwood habitats within the planning area.

Source: Foothill Associates, 2000.

Woolly violet. Woolly violet, a CNPS 1B listed species, occurs in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest habitats. This species is known from elevations ranging from 3,300 to 6,500 feet above MSL, and is associated with gravelly soils within open canopy forests. Three occurrences of this species are listed with the CNDDDB within the 5-mile radius of the Plan area. Due to the presence of suitable habitat, woolly violet could occur within the Plan area.

Red Hills soaproot. Red Hills soaproot is a federal species of concern and is a CNPS 1B listed species. This species occurs in chaparral, lower montane coniferous forest, and cismontane woodland habitats within 540 to 2,500 feet above MSL. This species requires serpentinite and gabbro derived soil conditions. One record of Red Hills soaproot is listed with the CNDDDB within the five-mile radius of the Plan area. The chaparral, blue oak woodland, montane hardwood, and coniferous forest habitats within the Plan area represent suitable habitat for Red Hills soaproot, and this species could occur, within suitable soil conditions, in these habitats in the Plan area.

Pine Hill flannelbush. Pine Hill flannelbush is federally listed as endangered and is a state listed rare species. This species is also listed by the CNPS as a 1B species. Pine Hill flannelbush occurs in chaparral and cismontane woodland habitats on gabbroic or serpentinite soils. This species is known from ten occurrences within El Dorado County and one record in Nevada County. Two records of this species are listed with the CNDDDB in El Dorado County within the 5-mile radius of the Plan area. Because this species is extremely rare, it is unlikely that it occurs within the Plan area. However, without conducting focused surveys for this species, the possibility that Pine Hill flannelbush may occur within the Plan area cannot be ruled out.

Stebbins's morning glory. Stebbins's morning glory is federally and state listed as endangered. This species is also listed by the CNPS as a 1B species. Open chaparral and cismontane woodlands represent suitable habitat for this species; however, Stebbins's morning glory is restricted to serpentinite or gabbroic soil conditions within these habitats. This species is known from El Dorado and Nevada counties and is listed with the CNDDDB as occurring within the 5-mile radius of the Plan area. Because suitable habitat exists in the chaparral and blue oak woodland habitats in the Plan area, and suitable soil conditions are present, this species could occur here.

Geology

The geologic units in the Foresthill Divide Community Plan area consist predominantly of metamorphic rocks common to the Sierra Nevada foothills. Metamorphic rocks in the area originally were deposited as volcanic lava flows, volcanic ash falls (tuffs), and sedimentary rocks. They were compressed, hardened, and tilted on edge due to great forces in the earth acting over long periods of time to create the present metavolcanic and metasedimentary rock units.

The majority of the developed areas along the Foresthill Divide and in the northeastern portion of the Plan area are composed of Mehrten Formations, including undifferentiated Tertiary andesitic mudflows, volcanic breccias, pyroclastic deposits, lava flows, and sedimentary fluvial deposits composed almost entirely of andesitic material.

Metavolcanic rock of the Calaveras complex occurs under thin soils on steep canyon slopes, and includes serpentine. These units are dark green, hard, mostly massive, and some are highly schistose. The rock is iron-rich and produces thin, dark red, iron rich soil.

Metasedimentary rocks of the Calaveras Complex are dark gray and highly fissile, and contain lenticular masses of greenstone, limestone, chert, and graywacke. Mostly the rocks are soft, intensely jointed metashales and metasandstones with scattered hard ribs of black slate. Soil thickness and nature vary with the underlying parent rock. The units are susceptible to raveling and shallow slips along fracture planes in open cuts. This complex is located on steep canyon slopes on the Foresthill Divide, on either side of the ridge from the Foresthill townsite.

Areas of the Foresthill Divide, and the Sierra Nevada in general, have a rich history of gold and mineral mining. Historically, chromium was mined for steel alloy for use during wartime. However, mining of chromium, iron, and nickel are no longer financially feasible. Mining of silver and gold continues to be a viable livelihood for a small number of miners on the Divide. Approximately 20 to 30 individuals are involved in hard rock mining on private claims, some of which are located on National Forest Service lands. The Michigan Bluff area has several company gold mines that have been active since the late 1980's. Mining is highly restricted and regulated by State and federal law, and requires permits from County, State, regional and federal agencies. Operations involving the diversion of water are regulated and monitored by the Department of Fish and Game and the Regional Water Quality Control Board. There are many

risks associated with mining, such as exposure to gases, standing water, and mining equipment; for this reason, the general public has little involvement with mining on the Foresthill Divide.

Topography and Slope

Slope is a term used to describe the degree of vertical rise or fall of a hill or mountain. It is a major factor in the planning process as it relates to access and suitability of building sites. Elevations range from approximately 590 to 4,790 feet above mean sea level (MSL).

The Foresthill Divide Community Plan area, located in the Sierra Nevada foothills, has a significant percentage of lands with steep slopes. The Plan area is characterized by a relatively flat ridge (0-9 percent slope) with steep sloping hillsides (in excess of 30 percent) that slope to the North and Middle Fork American River.

The majority of existing residential development in the Plan area has taken place on the flat or gently sloping areas of the terrain. Development on steep slopes (in excess of 30 percent) should be discouraged as much as possible so as to prevent excessive road grades, erosion, cuts and fills and attendant environmental problems.

Paleontology

The Placer County General Plan Background Report states that fossilized plant and animal remains could be found in nearly all of Placer County, although no inventory or other information source exists that characterizes the extent, sensitivity, or significance of paleontological resources. The Background Report states:

Fossil remains of prehistoric plant and animal life could be found in the sedimentary rocks and volcanic rock sedimentary materials that are present throughout western Placer County. Sediments associated with the Mehrten Formation in the Roseville [and Foresthill Divide] area have been found to contain fossils of terrestrial vertebrates. Fossilized animal remains also may be present in caves associated with the limestone geology that can be found in the central part of the Sierra Nevada foothills.

Large paleo-botanical fossil beds have been found in the Sierra Nevada foothills just north of the Plan area in Nevada County. They are world class deposits, estimated to be 10 million years old. Similarly, there has been a mastodon finding on Forest Service land near Truckee. While no such fossil beds or remains have been discovered within the Plan area, there is a likelihood that some may be exposed as a result of hardrock mining or development projects.

Hydrology and Surface Flows

According to the Placer County General Plan Background Report, the Foresthill Divide is located within the North Fork American River and Middle Fork American River surface water drainage basins. The basins are separated by the ridge line of the Foresthill Divide, and are comprised of 11 smaller watersheds.

The North and Middle Fork American River are major surface flows that define the area and have their confluence near Lake Clementine, in the western-most portion of the Plan area. From the confluence, the American River feeds Folsom Lake and ultimately the Sacramento River. The Plan area includes numerous important tributaries to the American River, many of which are spring-fed.

According to the Placer County General Plan Background Report, the North Fork American River has its headwaters in the Granite Chief area, and has a relatively narrow drainage basin above Folsom Lake. Federal legislation has designated the North Fork above the Auburn State Recreation Area as a National Wild and Scenic River, precluding motorized river access or activities on the river, but permitting access on foot.

The Middle Fork American River begins in the Picayune Valley and the river forms part of the southern boundary of Placer County and the Foresthill Divide Community Plan area. According to the Background Report, the Middle Fork American River (near Foresthill) has a 20-year average flow of 66 cubic feet per second (cfs).

Placer County contains approximately 700 miles of rivers and 97,000 acres of lakes (General Plan Background Report). Two of the eight major reservoirs in the county are located within the Plan area. Lake Clementine is fed by the North Fork American River and is located in the far western portion of the Plan area. Lake Clementine has a 12,800 acre-foot storage capacity and is operated by the Army Corps of Engineers. Lake Clementine is used for power production and recreational purposes. Sugar Pine Reservoir is located in the northeastern portion of the Plan area and is fed by North Shirttail Creek, Pagge Creek and Forbes Creek. The reservoir has a 7,000 acre-foot capacity and supplies a maximum 3,000 acre-feet to the Foresthill Public Utility District (PUD). It is owned by the U.S. Bureau of Land Management, and is operated by the Foresthill PUD.

Water quality trend studies have never been done for the American River basin; however, waters above Folsom Lake are typically of good quality and are suitable for all beneficial uses as specified by the California Department of Health Services. Increased urbanization and recreation on Folsom Lake have resulted in the degradation of water quality downstream from Folsom Dam. The Foresthill Divide Community Plan area remains above these affected areas, and is the source for many of the surface flow origins. Overall, water quality within the Plan area is of excellent quality and is considered one of the area's primary assets.

However, as stated in the Placer County General Plan Background Report:

A review of available data from monitoring locations within the American River basin above Folsom Dam indicates that dissolved oxygen and temperature levels have all been above the specified water quality limit. All measured specific conductance values are below suggested limits. Acidity levels outside the water quality objective range have been observed on the Middle Fork of the American River and are probably attributable to the photosynthetic activity of aquatic plants that absorb dissolved carbon dioxide during daylight. The specified

concentration for nitrate has not been exceeded; however, the concentrations of phosphorus have been exceeded at all observation sites in the upper American River basin but these observations infrequently approached the suggested limits.

During the reauthorization of the Clean Water Act, Sections 402(P) through Section 405 of the Water Quality Act of 1987 were added, providing for a program to eliminate pollution from non-point municipal and industrial sources. Land development and construction activities of five or more acres were also included under this legislation. The addition of stormwater discharges to the National Pollutant Discharge Elimination System (NPDES), the primary federal water quality permit system administered by the federal Environmental Protection Agency (EPA), was completed on October 31, 1990, when EPA signed the final regulations. On November 16, 1990, the final rule and regulations for the NPDES Permit Application for Storm Water Discharges [40 Code of Federal Regulations (CFR) 122-124] were published in the Federal Register.

The State Water Resources Control Board has the authority to issue NPDES permits in Placer County. The State Board has issued two types of stormwater permits. A general permit has been issued for non-point municipal and industrial stormwater discharges, excluding construction activities. A second permit applies to all construction activity (with the exception of those on Indian lands and the Lake Tahoe hydrogeologic unit).

Development in the Plan area would fall under the general construction activity stormwater discharge permit process. The general construction permit authorizes the discharge of stormwater and prohibits the discharge of materials other than stormwater and all discharges that contain a hazardous substance in excess of reportable quantities established in 40 CFR 117.3 or 40 CFR 302.4, unless a separate NPDES permit has been issued to regulate those discharges. A general permit would require that a project applicant control discharges associated with construction activity by:

- eliminating or reducing non-stormwater discharges to stormwater systems and other waters of the nation;
- developing and implementing a stormwater pollution prevention plan (SWPPP); and
- performing inspections of stormwater control structures and pollution prevention measures.

NPDES Stormwater Phase II is a far-reaching federally mandated program requiring installation of Best Management Practices (BMPs) to improve non-point source pollution of stormwater runoff. Among other requirements, after March 10, 2003 the law requires installation of BMPs for water quality control for long-term (post-construction) improvement in water quality runoff from development projects. The six basic elements of the NPDES Phase II permit are:

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

Under the provisions of NPDES II, developers in the Plan area will be required to design and install such BMPs as are determined to be appropriate.

The construction and operation of any community wastewater facilities in the Plan area will be subject to Waste Discharge Requirements which will be imposed by the Central Valley Regional Water Quality Control Board.

Water Resources

The Plan area is rich with water resources, including relatively intact watersheds that provide the Foresthill Divide with an excellent source of drinking water, groundwater supplies that support private well systems on the Divide, and surface waters that provide for fishing, recreation, and drinking water.

Watersheds

A watershed is an area drained by a river or river system. It is an essential ecological unit, upon which the health of the overall landscape depends. Watersheds left undisturbed by road building, logging, construction, agriculture, and mining operations will serve the greatest ecological function by preventing mudflows, water contamination, flooding, and personal property loss, while greatly enhancing regional water quality. Unlike the human-built environment, watersheds do not conform to geo-political boundaries. Watersheds form their own boundaries based on regional drainage basins and river systems, and often extend over multiple county and state lines.

The American River Watershed is a vast and precious resource in the northern Sierra Nevada mountains. It begins near the Sierra crest, and its waters carry trout, provide water for numerous wildlife species, contain gold, and irrigate the Sacramento Valley and Delta. The American River Watershed Group is an affiliation of interested groups and private landowners, as well as local, state, and federal agencies committed to enhancing and maintaining the health of the American River watershed. According to the Group:

A watershed is made up of more than vegetation, trees and brush, which can provide fuel for catastrophic fire. It also includes the land, minerals & soils, animals, creeks, rivers, & water bodies—and the water therein, air, communities and business enterprises situated on the lands which drain to the American River.

Located in Placer, El Dorado, and Nevada Counties in the Sierra Nevada mountains of California, the [American River] watershed, which comprises 616,541 acres (963 square miles) is an important source of water, wildlife habitat, forest vegetation, clean air, and recreation opportunities.

The American River Watershed Group has undertaken a Coordinated Resource Management Plan (CRMP) for the watershed. The Plan area includes 222,360 acres along the North Fork American River and 394,181 acres along the Middle Fork American River. The CRMP focuses on reduction of the fuel load and improvement of the forest ecosystem. The Watershed Group

works in cooperation with the Foresthill Fire Protection District, Sierra Planning Organization, Tahoe and El Dorado National Forests, and a variety of Federal and County agencies.

The Foresthill Divide Community Plan area contributes significantly to the larger American River Watershed. The Plan area is comprised of smaller watersheds. The Pagge Creek Watershed in the northeastern-most portion of the Plan area contributes the majority of drinking water to the Plan area.

Groundwater

There are 97 wells in Placer County that are monitored by the State Department of Water Resources. Long term groundwater level data for Placer County are only available for wells near Roseville and between Highway 65 and the Sutter County line. The Plan area is located within the Central Placer County resource area. Groundwater data for the Plan area is not available.

On the western slopes of the Sierra Nevada, groundwater is generally found in zones of fractured rock. Most areas have limited quantities of groundwater. As stated in the Placer County General Plan Background Report:

Due to the varying geologic formations which exist throughout the central region consisting largely of fractured rock, groundwater is not as abundant as in the western valley alluvium. Although some areas exhibit excellent production and high quality wells, many areas experience low well yields which are some times coupled with iron and manganese contamination.

Continued use of a community water system is recommended for higher density areas within the Plan area in order to minimize the risk of nitrate contamination in private wells. A significant portion of the Plan area is located outside the Foresthill PUD boundaries and other water system service areas, and could not be connected to a community water system. However, most of these areas are not considered suitable for development.

Water Supply

Within the Plan area, water is supplied by a combination of private wells and community water systems. The Foresthill PUD provides domestic water supply for Todd's Valley and Foresthill, and Baker Ranch Water District provides domestic water supply for the existing mobile home park. Michigan Bluff Water District supplies the Michigan Bluff community. In addition, many individual parcels are supplied with pumped groundwater by individual wells.

Foresthill PUD supplies 2,800 acre-feet of water from BLM-owned Sugar Pine Reservoir, and supplements the supply with an additional 200 acre-feet from 2 domestic wells. According to the District, current supply is more than adequate to serve existing development and a buildout population of 13,500. The BLM originally designed the reservoir for eventual capacity expansion; the dam could potentially be raised an additional 4 to 5 feet to accommodate an additional 4,000 to 5,000 acre-feet. However, it is important to note that the expansion of facilities would not be without significant environmental impact, and would submerge existing

recreational facilities around the reservoir. Foresthill PUD is pursuing the purchase of Sugar Pine Reservoir from the BLM.

Fish and Wildlife

The Foresthill Divide Community Plan area supports the habitats described. The dominant wildlife species associated with these habitats are described below, and the habitats are shown in Figures IV-1 and IV-2 of the FDCP.

Coniferous Forest

Coniferous forest habitats provide cover, foraging, and breeding habitat for a large diversity of resident and migratory wildlife. Wildlife species expected to occur in this habitat include western tanager (*Piranga ludoviciana*), brown-headed cowbird (*Molothrus ater*), chipping sparrow (*Spizella passerina*), and Steller's jay (*Cyanocitta stelleri*). Additional species associated with coniferous forest habitats include mule deer (*Odocoileus hemionus californicus*), white-breasted nuthatch (*Sitta carolinensis*), black bear (*Ursus americanus*), raccoon (*Procyon lotor*), mountain lion (*Felis concolor*), western gray squirrel (*Sciurus griseus*), Oregon junco (*Junco hyemalis thurberi*), yellow-rumped warbler (*Dendroica coronata*), and northern flicker (*Colaptes auratus*).

Montane Hardwood

Wildlife species utilize montane hardwood habitats for shelter, foraging, and breeding habitat. Numerous common and migratory wildlife species are found in this habitat including mule deer, western bluebird (*Sialia mexicana*), western tanager, scrub jay (*Aphelocoma californica*), red-tailed hawk (*Buteo jamaicensis*), opossum (*Didelphis marsupialis*), and turkey vulture (*Cathartes aura*). Additional species expected to utilize this habitat include American crow (*Corvus brachyrhynchos*), California ground squirrel (*Spermophilus beecheyi*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker, Anna's hummingbird (*Calypte anna*), coyote (*Canis latrans*), great horned owl (*Bubo virginianus*), raccoon, porcupine (*Erethizon dorsatum*), blacktail jackrabbit (*Lepus californicus*), wild turkey (*Meleagris gallopavo*), and red-shouldered hawk (*Buteo lineatus*).

Chaparral

Chaparral habitats found within the Plan area support suitable shelter, foraging, and breeding habitat for numerous species of wildlife. Species commonly associated with these habitats include ash-throated flycatcher (*Myiarchus cinerascens*), mule deer, spotted towhee (*Pipilo erythrophthalmus*), blacktail jackrabbit, California quail (*Callipepla californica*), Bewick's wren (*Thryomanes bewickii*), and turkey vulture.

Blue Oak Woodland

Blue oak woodland provides suitable breeding and foraging habitat for common and migratory wildlife species, and also provides a source of shelter for these species. Wildlife expected to

utilize this habitat include mule deer, northern flicker, red-tailed hawk, scrub jay, western bluebird, western tanager, blacktail jackrabbit, and wild turkey.

Annual Grassland

Annual grassland habitats support low wildlife species diversity; however, common and migratory species utilize this habitat. Typical species that occur in grasslands on the site include house finch, savannah sparrow (*Passerculus sandwichensis*), red-tailed hawk, western kingbird (*Tyrannus verticalis*), western meadowlark (*Sturnella neglecta*), lesser goldfinch (*Carduelis psaltria*), blacktail jackrabbit, coyote, and California ground squirrel.

Urban

Predominantly common and some migratory species are found in urban regions within the Plan area. Species typically associated with this habitat type include rock dove (*Columba livia*), scrub jay, yellow-billed magpie (*Pica nuttalli*), American crow, turkey vulture, and California ground squirrel.

Ruderal/Barren

Ruderal/barren habitat provides marginal foraging and breeding habitat for wildlife species. Species expected to occur within this habitat include American robin (*Turdus migratorius*), mourning dove, turkey vulture, and killdeer (*Charadrius vociferus*).

River/Stream

Wildlife utilizing stream habitats include mostly aquatic species such as bullfrog (*Rana catesbeiana*), Pacific chorus frog (*Pseudacris regilla*), and fish species. However, numerous wildlife species forage in stream habitats, including northern flicker, mule deer, raccoon and belted kingfisher (*Ceryle alcyon*).

Open Water

Numerous aquatic species utilize open water habitats, including fish species, bullfrog, and Pacific chorus frog, as well as mammals and avian species (for foraging habitat). Additional wildlife species expected to occur in association with these habitats include belted kingfisher, raccoon, and mule deer. Additionally, unconfirmed western pond turtle (*Clemmys marmorata*) sightings are known from the Foresthill Divide Community Plan area, and this species likely utilized open water habitats in this region.

No listed anadromous fish species in Table 3.6-2 are likely to occur within the Plan area due to obstructions (e.g., Folsom Dam, Nimbus Dam) in the southern reaches of the American River. Additionally, the remaining special-status fish species listed are not likely to occur within the Plan area due to obstructions in the southern reaches of the American River and habitat/range limitations.

Special-Status Animal Species

Special-status animal species are species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Definitions of listed and special-status species are provided above. In addition to the regulatory agencies and status listed in that section, raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Special-Status Animal Species Presence in the Community Plan Area

Table 3.6-2 identifies the animal species listed in the USFWS species list for the Auburn, Colfax, Dutch Flat, Foresthill, Georgetown, Greenwood, Michigan Bluff, and Westville 7.5-minute USGS quadrangles, all of which have once occurred in the vicinity of the Plan area. Additionally, animal species listed in the CNDDDB as occurring within a 5-mile radius of the Plan area are included in Table 3.6-2. Species listed as having no potential for occurrence are species either not expected to occur within the Plan area based on the known range of the species, or not expected to occur due to lack of suitable habitat within the Plan area. Listed and special-status animal species that are known to occur, or may potentially occur, within the Plan area are listed in Table 3.6-3 and described below. The animal species described below were considered for this analysis based on field surveys and review of the CNDDDB database, USFWS species lists for the Placer County vicinity, and existing documentation for the Foresthill Divide vicinity.

Listed and Special-Status Animals

The CNDDDB lists nine special-status wildlife species as occurring within the 5-mile radius of the Plan area. Potential habitat is present within the Plan area for all nine species: spiny rhyacophilan caddisfly (*Rhyacophila spinata*), Yates’ snail (*Ammonitella yatesi*), California horned lizard (*Phrynosoma coronatum frontale*), California red-legged frog (*Rana aurora draytonii*), mountain yellow-legged frog (*Rana muscosa*), northwestern pond turtle (*Clemmys marmorata marmorata*), black swift (*Cypseloides niger*), Pacific fisher (*Martes pennanti pacifica*), and northern goshawk (*Accipiter gentilis*). Eleven additional special-status species recorded in the USFWS species lists for the Auburn, Colfax, Dutch Flat, Foresthill, Georgetown, Greenwood, Michigan Bluff, and Westville quadrangles have the potential to occur within the Plan area. These species include Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), foothill yellow-legged frog (*Rana boylei*), western spadefoot toad (*Scaphiopus hammondi*), western burrowing owl (*Athene cunicularia hypugae*), American peregrine falcon (*Falco peregrinus anatum*), California spotted owl (*Strix occidentalis occidentalis*), bald eagle (*Haliaeetus leucocephalus*), tricolored blackbird (*Agelaius tricolor*), Sierra Nevada showshoe hare (*Lepus americanus tahoensis*), Sierra Nevada red fox (*Vulpes vulpes necator*), and pine marten (*Martes americana*). Additionally, numerous species of bats listed in the USFWS

species list, including spotted bat (*Euderma maculatum*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotis volans*), Yuma myotis (*Myotis yumanensis*), small-footed bat (*Myotis ciliolabrum*), and greater western mastiff bat (*Eumops perotis*), are known from the vicinity of the Plan area and are described below. Raptors and other migratory birds are protected by state and/or federal resource agencies and are also described below.

Spiny rhyacophilan caddisfly. The spiny rhyacophilan caddisfly is a federal species of concern. This species occupies streams and rivers and is associated with reaches supporting a continually flowing current and cool temperature conditions. One record of this species is listed with the CNDDDB from Ladys Canyon, which is located within the southeastern boundary of the Plan area. Suitable habitat for this species is present in the Plan area, and consequently additional populations of this species may occur here.

Yates' snail. Yates' snail is a federal species of concern. This species occupies caves and outcroppings derived from limestone and is commonly found on north-facing slopes. One record of this species is listed with the CNDDDB approximately one mile from the southwestern boundary of the Plan area. Several locations within the Plan area support rock outcroppings and depending whether these locations are derived from limestone, these areas could support suitable habitat for this species.

California horned lizard. California horned lizard is a species of special concern to the USFWS and the CDFG. In northern California, this species occurs in loose friable soils within grassland, woodland, and coniferous forest habitats below 2000 feet. This species was not observed during field reconnaissance; however, this species is listed with the USFWS as having once occurred in the Plan area vicinity, and four records are listed within the 5-mile radius of the Plan area. Suitable habitat for this species exists in the Plan area, and consequently this species could occur here.

California red-legged frog. The California red-legged frog is federally listed as threatened and is a species of concern to the CDFG. This species is found primarily in slow moving streams, marshes, and ponds in elevations below 4,000 feet. California red-legged frog is extremely rare and declining within the Sierra Nevada. Recent surveys have found this species at only two locations in the Sierra, one population in Butte County and one population in El Dorado County. However, this species historically occurred throughout lower elevations in the Sierra, and isolated populations may still be extant. This species was not observed during field reconnaissance; however, suitable habitat for this species occurs in the intermittent drainages and streams within the Plan area. This species is listed with the CNDDDB in the Michigan Bluff vicinity, which is located within the Plan area; however, this observance is a historical occurrence, recorded prior to 1951. This species is also listed with the USFWS as having once occurred in the Foresthill Divide vicinity. Due to the presence of suitable habitat within the Plan area, California red-legged frog may occur here.

Mountain yellow-legged frog. Mountain yellow-legged frogs are a species of concern to federal and state resource agencies. This species is found associated with lakes, streams, and ponds in elevations ranging from 1,200 to 7,500 feet above MSL. Historically, this species' range

spanned the Sierra Nevada and portions of Los Angeles and San Bernardino Counties; however, currently the southern populations of this species are limited to the San Jacinto and San Gabriel Mountains. In northern California, this species is currently found throughout the Sierra Nevada from Plumas County southward to Tulare County. The USFWS lists this species as once occurring in the vicinity of the Foresthill Divide, and one record of mountain yellow-legged frog is recorded with the CNDDDB within approximately one mile of the Plan area. Given this species' current distribution, habitat requirements, and known occurrences in the Foresthill Divide vicinity, mountain yellow-legged frog likely utilize the streams and/or lakes within the Plan area.

Northwestern pond turtle. The northwestern pond turtle is a species of concern to the USFWS and is also a California Species of Special Concern. This species is typically found along quiet streams and ponds, and feeds on aquatic plants, fish, and invertebrates. Four records of this species are listed within the 5-mile radius of the Plan area. Although not observed, this species could occur in slower reaches of the intermittent drainages and streams and in the open water habitats within the Plan area.

Black swift. Black swifts are a species of concern to federal resource agencies. This species nests in the Sierra Nevada and Cascade Range, and is also known to nest in the San Gabriel, San Bernardino, and San Jacinto mountains. Black swifts occupy these locations in California during the breeding season. Suitable nesting habitat for this species includes crevices on sea cliffs and on cliffs adjacent to waterfalls. A water source is required at the nest location. One occurrence of this species is recorded in the Plan area. As a result, this species may nest and forage here.

Pacific fisher. Pacific fishers are a species of concern to state and federal resource agencies. This species is found in dense, closed canopy coniferous forests and riparian habitats in the Sierra Nevada, Cascades, and Klamath mountains. This species dens in hollow logs, trees, and snags within dense closed canopy forests. The CNDDDB lists this species as occurring within the 5-mile radius of the Plan area, and this species was identified on the USFWS species list as having once occurred in the Plan area vicinity. Consequently, suitable habitat for this species exists in the Plan area, and this species may occur here.

Northern goshawk. Northern goshawks are a species of concern to federal and state resource agencies. This species frequents middle to high elevation mixed coniferous forest habitats, although it prefers dense stands of lodgepole pines on north-facing slopes near water for nesting. Northern goshawk foraging habitats are widespread, consisting of mixed coniferous forest habitats. Five records of this species are listed with the CNDDDB in the Foresthill Divide vicinity, and this species is also known to historically occupy this region. Suitable nesting, foraging, and wintering habitat for this species occurs within the Plan area, and this species likely utilizes these habitats.

Valley elderberry longhorn beetle. Valley elderberry longhorn beetle is a federally listed threatened species. This species is commonly found near riparian habitats within the Central Valley; however, its range spans the Sierra foothills, and may reach elevations of 3,000 feet. This species is dependent on elderberry shrubs for the larval stage of its life cycle. For this reason, elderberry shrubs are considered habitat for this species. This species is listed with the

USFWS as having once occurred in the Foresthill Divide vicinity. No elderberry shrubs were found in the Plan area during field reconnaissance. However, a focused survey for elderberry shrubs has not been conducted for the Plan area vicinity, and elderberry shrubs may occur within the Plan area boundary. As a result, Valley elderberry longhorn beetle may occur within the Plan area.

Foothill yellow-legged frog. The foothill yellow-legged frog is of concern to federal resource agencies and is a California Species of Special Concern. This species occurs in the foothills of the Sierra Nevada up to 6,000 feet. Foothill yellow-legged frogs require shallow, flowing water with cobble-sized substrate. While this species is not listed in the CNDDDB within the 5-mile radius of the Plan area, it is listed as having once occurred in the Plan area vicinity. Suitable habitat for this species is present in the streams and intermittent drainages within the Plan area, and this species could occupy these habitats.

Western spadefoot toad. Western spadefoot toad is a federal and California species of concern that occurs in grassland habitats near seasonal water sources, such as vernal pools or seasonal wetlands. Habitat for this species is in rapid decline, and as a result this species is of special concern to the CDFG and the USFWS. This species was not observed within the Plan area during field reconnaissance; however, western spadefoot toad is listed with the USFWS as having once occurred in the Foresthill Divide vicinity. Consequently, this species could occur in the Plan area in seasonal wetlands associated with annual grassland habitats.

Western burrowing owl. The Western burrowing owl is a species of concern to the USFWS and CDFG. Burrowing owls inhabit open grasslands of the Central Valley. Typically, they nest in small colonies in abandoned ground squirrel burrows. This species may also be found along canal banks. No records of this species are listed with the CNDDDB within the 5-mile radius of the Plan area, and no burrows or evidence (pellets, white wash, feathers, etc.) of this species was observed during field reconnaissance. However, suitable grassland habitat for this species is present within the Plan area, and this species is historically known from the Foresthill Divide vicinity. Consequently, this species may utilize grassland habitats within the Plan area.

American peregrine falcon. American peregrine falcon is currently state-listed as endangered, and was recently removed from the federal endangered species list. This species nests in a wide variety of habitats, including woodlands, dense coniferous forests, and coastal habitats. Nests are typically located in close proximity to a water source on cliffs, banks, or dunes. California populations of the peregrine falcon declined in the 1970s due to DDT contamination; however, numbers are increasing statewide. This species is recorded in the USFWS species list as having once occurred in the Foresthill Divide vicinity; however, the CNDDDB lists no recent records of this species within the Plan area. Suitable nesting, foraging, and wintering habitat for this species is present within the Foresthill Divide Community Plan area, and as a result this species could occur here.

California spotted owl. California spotted owl is a species of concern to state and federal resource agencies. This species occurs in old growth forests with multi-layered canopies, and is associated with mixed coniferous, redwood, and Douglas fir forest habitats. This species' range spans habitats up to 7,600 feet above MSL. Suitable nesting habitat includes cavities in trees or

snags; however, this species is known to nest in abandoned raptor nests, mistletoe clusters, caves, and cliffs. California spotted owl is a year-round resident of California. However, in mountainous regions such as the Sierra Nevada, this species may move to lower elevations during winter months. According to the USFWS species list, historically this species is known from the Foresthill Divide vicinity. Although no recent occurrences of this species in the Foresthill Divide vicinity are recorded with the CNDDDB, suitable foraging and nesting habitat for California spotted owl occurs within the Plan area, and this species may occur here.

Bald eagle. The bald eagle is federally listed as threatened and state listed as endangered. This species nests in the northernmost counties of California within dense conifer stands and woodlands and in scattered small populations at reservoirs in the central portion of the state. Nest locations are restricted to areas within close proximity to permanent water sources. Historically, this species was known from the Foresthill Divide vicinity, and suitable wintering habitat for this species is located within the Plan area. Consequently, bald eagles may utilize coniferous forest and montane hardwood habitat within the Plan area during the winter months.

Tricolored blackbird. Tricolored blackbirds are a species of concern to federal and state resource agencies. This species nests colonially in dense stands of cattails or within blackberry thickets, and requires a source of fresh water. Consequently, this species typically occurs in fresh emergent wetlands. While no records of this species are recorded with the CNDDDB within the 5-mile radius of the planning area, this species is known historically from the Foresthill Divide vicinity. This species was not observed during field reconnaissance; however, suitable habitat may occur within the Plan area. Consequently, this species could occur here.

Sierra Nevada showshoe hare. The Sierra Nevada showshoe hare is a species of concern to state and federal resource agencies. This species, a subspecies of *Lepus americanus*, is restricted to the Sierra Nevada mountain range, and population numbers are thought to be low. Sierra Nevada showshoe hares occupy young growth mixed conifer, subalpine conifer, red fir, Jeffrey pine, lodgepole pine, and aspen forests, and often utilize habitats characterized with dense understory growth located along forest edges in close proximity to meadows. The USFWS species list records this species historically in the Foresthill Divide vicinity. Although no recent records of the Sierra Nevada showshoe hare are listed with the CNDDDB, suitable habitat for this species is present within the Plan area, and this species may occur here.

Sierra Nevada red fox. The Sierra Nevada red fox is a federal species of concern, and is listed in California as threatened. This species is typically found in higher elevations (above 7,000 feet MSL), but is known to occur in elevations as low as 3,900 feet above MSL. Sierra Nevada red fox occurs in a variety of habitats, including lodgepole pine, mixed conifer, montane riparian, and Ponderosa pine forests within the Sierra Nevada mountain range. This species requires dense vegetation for cover, and prefers habitats adjacent to meadows for hunting. The Sierra Nevada red fox dens in rock outcrops and hollow logs, and is known to burrow in friable soils. Population numbers of this species are declining, and this species is rare throughout its range. Historically, this species occurred throughout the Foresthill Divide vicinity, although no recent records of the Sierra Nevada red fox are listed with the CNDDDB in the Plan area or the surrounding vicinity. While suitable habitat for this species occurs within the Plan area, no recent occurrences of this species are listed, and it is unlikely that this species utilizes the area.

However, without conducting focused surveys for this species in the Plan area, the possibility that this species could occur here cannot be ruled out.

Pine marten. Pine martens are a federal species of concern. This species occurs in various habitats along the north coast and within the Sierra Nevada, Klamath, and Cascades mountain ranges. This species prefers habitats exhibiting over 40 percent canopy closure, and is associated with red fir, lodgepole pine, subalpine conifer, mixed conifer, Jeffrey pine, and eastside pine habitats. This species dens in log, tree, or stump cavities, and sometimes burrows under snow adjacent to logs or stumps. Pine martens are sensitive to human disturbance and require habitat with limited human interaction. This species is listed in the USFWS species list historically within the Foresthill Divide vicinity. Suitable habitat for this species is present within the Plan area, and this species could utilize these habitats.

Bats. Bat species including spotted bat, long-eared myotis, fringed myotis, long-legged myotis, Yuma myotis, small-footed bat, and greater western mastiff bat are species of special concern to state and federal resource agencies. Habitat ranges for these bat species are widespread throughout California; however, many of these species are rare within these habitats. Habitat for bat species consists of foraging habitat, night roosting cover, maternity roost sites, and winter hibernacula. These bat species may forage within montane hardwood, coniferous forest, and blue oak woodland habitats within the Plan area. Suitable roosting sites within these habitats include caves, rock crevices, cliffs, buildings and snags. Because potentially suitable day, night, maternity, and winter roosting habitat exists in these habitats within the Plan area, some or all of these bat species likely utilize the Foresthill Divide and the surrounding vicinity.

Raptors. Numerous raptor species, including red-tailed hawk (*Buteo jamaicensis*), Coopers hawk (*Accipiter cooperii*), and sharp-shinned hawk (*Accipiter striatus*), forage and nest in the Sierra Nevada and surrounding foothills. Raptor nests are protected under the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the California Fish and Game Code. The blue oak woodland, montane hardwood, and coniferous forest habitats within the Plan area support potential nesting habitat for numerous raptor species. Consequently, raptor species likely forage and nest within the Foresthill Divide Plan area.

Other migratory birds. Migratory birds forage and nest in multiple habitats such as oak woodlands, grasslands, riparian woodlands, and coniferous forests. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest. Numerous migratory bird species have the potential to nest within the Plan area.

Agricultural/Timber Resources

This section discusses the agricultural and timber resources in the Plan area, and provides perspective on historic, current, and planned agricultural and timber resources and management practices in the area. Where possible, quantitative data are used; however, the record keeping systems of the Placer County Agricultural Commissioner, as well as U.S. Forest Service (USFS) and the California Department of Forestry and Fire Protection (CDF) do not categorize agricultural and timber commodities by Plan area. Existing agricultural and timber data provided by the respective agencies were compiled and synthesized with the aid of site surveys and

personal interviews to provide an estimate of agricultural and timber resources and harvest levels.

The 2000 gross value of agricultural production in Placer County was \$60,508,700. The timber industry generates an additional \$9,658,800, for a total countywide agricultural and timber value of \$70,167,500.

Due primarily to its elevation, the Plan area does not have an extensive agricultural heritage. According to the Placer County Agricultural Commissioner, a limited range of crops can survive in the 2,800 to 4,000 foot elevation range typical of the Plan area. These crops include walnuts, chestnuts, and apples. A small (15± acres) walnut orchard, a chestnut orchard, and scattered vineyards and back yard apple plantings represent the bulk of existing agricultural activities in the Plan area.

The Plan area experiences more late-season rains than lower elevation areas, making many crops susceptible to damage. Late rains also increase the potential for powdery mildew on many varieties of grapes. Although some soils in the Plan area can be rocky and/or shallow, there are no inherent soil conditions that would prevent agricultural production. Rather, the lack of extensive irrigation infrastructure and availability of richer agricultural lands elsewhere in the county are primary factors behind the lack of agricultural activity in the area, as well as small parcel sizes in areas with soils suitable for agriculture. Special water rates are available for agricultural irrigation water. However, there has been some recent interest shown in limited wine grape production in the Plan area.

Fruit and nut crop values in Placer County have declined from \$5,149,000 in 1994 to \$3,733,800 in 2000. In the early 1900s, agriculture and timber played a dominant role in Placer County's economy. While agriculture and timber production are still important sectors of the Placer County economy, other industries such as manufacturing, recreation, and services have gained dominance.

The Plan area contains an interface between exclusive Placer County land use jurisdiction and the jurisdiction of the USFS, which is responsible for managing land uses and timber resources in the Tahoe National Forest. Additionally, CDF has regulatory authority over timber harvest activities on privately held timber land under the Z'Berg Nejedly Forest Practices Act of 1973. Since the Plan area lies within an area designated as Very High Fire Hazard Area, CDF is also actively engaged in fuel reduction programs to reduce the high levels of brush and timber fuel loading that contribute to wildland fire hazard in the area.

Timber croplands represent approximately 33 percent of land within Placer County. Most of the timber croplands and lands under Timberland Production Zone (TPZ) are located east of Foresthill, although the Plan area contains more than 20 square miles of privately held timber land.

The Forest Taxation Reform Act of 1976 requires nonfederal timber-producing lands to be classified by County ordinances into TPZs through a process involving the County Assessor, the County Planning Commission, and timber owners. Lands in TPZs may be used for growing

forest products and compatible uses only, and property taxes on TPZ lands are based on those limited uses. The land is subject to the usual County property tax, and the trees on land within a TPZ are not subject to taxation until harvested.

In 1986, Placer County contained approximately 423,000 acres of commercial forestland. Of this total, approximately 126,000 acres were included in TPZs.

Between 1995 and 2000, CDF approved 30 Timber Harvest Plans on an estimated 7,045 acres of privately owned lands south of Shirttail Canyon and east of the Tahoe National Forest boundary in the Plan area, as shown in Table 3.6-4. The majority of the plans (24 plans, covering 4,170 acres) were for shelterwood removal, wherein larger trees that block or overshadow younger trees are removed in order to open the forest canopy and enhance timber growth. Approximately 103 acres of clear cutting were authorized in Timber Harvest Plans in 1996 and 1997, with no approved plans since that time.

Small scale commercial timber harvest still occurs on private lands in the Plan area, and is likely to continue in the future. As of July 2000, CDF had approved one 3-acre Timber Harvest Plan for commercial tree thinning, and four Timber Harvest Plans on 370 acres for shelterwood removal. The amount and type of harvest proposed (e.g., clearcutting, thinning) is a function of the goals of the landowner. Commercial timber companies typically manage stands of timber to enhance production, while individual property owners may be more interested in a one-time timber harvest to generate revenues or clear a building pad.

Table 3.6-4
Timber Harvest Documents
for Foresthill Divide Community Plan Area
1995-2000

No. of Docs.	Harvest Doc.	Acres	Section	Township	Range
1	2-00-094-Pla3	17	35	14N	10E
	2-00-094-Pla3		34	14N	10E
2	2-00-093-Pla3	253	32	14N	10E
	2-00-093-Pla3		31	14N	10E
3	2-00-089-Pla3	110	13	14N	10E
	2-00-089-Pla3		14	14N	10E
4	2-98-360-Pla3	168	24	14N	10E
	2-98-360-Pla3		23	14N	10E
	2-98-360-Pla3		14	14N	10E
	2-98-360-Pla3		13	14N	10E
5	2-98-145-Pla3	56	33	14N	10E
	2-98-145-Pla3		32	14N	10E
6	2-98-130-Pla3	35	23	14N	10E
7	2-98-085-Pla3	17	32	14N	10E
8	2-98-043-Pla3	376	20	14N	10E
9	2-98-039-Pla3	11	25	14N	10E

No. of Docs.	Harvest Doc.	Acres	Section	Township	Range
10	2-98-035-Pla3	37	33	14N	10E
11	2-97-403-Pla3	64	25	14N	10E
12	2-97-218-Pla3	196	25	14N	10E
	2-97-218-Pla3		24	14N	10E
	2-97-218-Pla3		13	14N	10E
	2-97-218-Pla3		12	14N	10E
13	2-97-070-Pla3	2,067	35	14N	10E
	2-97-070-Pla3		34	14N	10E
	2-97-070-Pla3		27	14N	10E
	2-97-070-Pla3		26	14N	10E
	2-97-070-Pla3		25	14N	10E
	2-97-070-Pla3		24	14N	10E
	2-97-070-Pla3		23	14N	10E
	2-97-070-Pla3		22	14N	10E
14	2-97-066-Pla3	22	24	14N	10E
	2-97-066-Pla3		13	14N	10E
15	2-97-062-Pla3	120	33	14N	10E
	2-97-062-Pla3		32	14N	10E
16	2-96-339-Pla3	5	28	14N	10E
17	2-96-074-Pla3	319	31	14N	10E
18	2-96-044-Pla3	201	29	14N	10E
	2-96-044-Pla3		19	14N	10E
19	2-95-363-Pla3	44	23	14N	10E
20	2-95-139-Pla3	19	24	14N	10E
	2-95-139-Pla3		13	14N	10E
21	2-99-268-Pla3	25	17	14N	11E
	2-99-268-Pla3		16	14N	11E
22	2-99-220-Pla3	144	22	14N	11E
	2-99-220-Pla3		21	14N	11E
	2-99-220-Pla3		16	14N	11E
	2-99-220-Pla3		15	14N	11E
23	2-99-092-Pla3	119	17	14N	11E
24	2-98-360-Pla3	168	17	14N	11E
25	2-99-235-Pla3	14	21	14N	11E
26	2-97-403-Pla3	64	9	14N	11E
27	2-97-228-Pla3	31	27	14N	11E
	2-97-228-Pla3		22	14N	11E
28	2-97-218-Pla3	196	30	14N	11E
	2-97-218-Pla3		19	14N	11E
	2-97-218-Pla3		18	14N	11E
29	2-97-209-Pla3	80	7	14N	11E
	2-97-209-Pla3		6	14N	11E
30	2-97-070-Pla3	2,067	30	14N	11E

No. of Docs.	Harvest Doc.	Acres	Section	Township	Range
Total Acreage		7,045			

Note: Since the California Department of Forestry and Fire Protection tracks Timber Harvest Plans by Township, Range, and Section, some of the above acreage may lie in sections that are not wholly within the Foresthill Community Plan area.

Source: California Department of Forestry and Fire Protection, 1995-2000.

Geologic Hazards

Seismicity

Seismicity refers to an area's propensity for earthquakes. Seismicity can be evaluated based on the occurrence of faults, both active and inactive. According to the 1977 Placer County Seismic and Safety Element, "the fault history of Placer County began about 140 million years ago with the folding, crushing, and faulting of marine sedimentary and volcanic deposits". Placer County is not known to possess active faults.

The Plan area is within the Melones fault zone; however, it is noted in the 1977 County Seismic and Safety Element that the central county area, which includes the Plan area, is the most stable area, formed on ancient granitic and metamorphic rock that contains no historically active faults. Western Placer County is more susceptible to seismic events, and eastern Placer County is historically earthquake-prone because the main frontal fault of the Sierra Nevada occurs about 6 miles east of Lake Tahoe. The Plan area has the potential to be affected by shock waves that would result from earthquakes in these areas.

Rockfall and Landslide

As defined by the California Division of Mines and Geology, a landslide is the downslope movement of soil and rock material under the influence of gravity. The formation of landslides under natural conditions depends on several factors including the type of materials, structural properties of the materials, steepness of slopes, water and rainfall, vegetation type, proximity to areas undergoing active erosion, and earthquake-generated ground shaking.

The canyon sides of the American River watershed are prone to sliding or slumping due to slopes in excess of 30 percent. There are several rock units within the Plan area that have active deposits. The units most likely to experience rockfalls and landslides include Valley Springs Tuff, Metavolcanic Flows, Mehrtren Mudflow Breccia (weathered), Serpentine, and Metasedimentary Rocks. Table 3.6-5 summarizes potentially unstable rock units and the landslide deposit classification.

Shallow and Serpentine Soils

Shallow and serpentine soils are a limiting factor to development. Serpentine soils surround Todd's Valley and are located east of Foresthill, on Forest Service lands, and along McKeon-Ponderosa Road. Portions of the Plan area are located over areas with shallow soils, especially

the slopes of the North and Middle Fork American River. Testing is now required by Placer County Environmental Health Services (HHS) for projects that would disturb serpentine soils.

Table 3.6-5
Potentially Unstable Rock Units

<u>Rock Unit</u>	<u>Landslide Deposits</u>
Valley Springs Tuff	Active
Metavolcanic Flows	Active
Mehrtren Mudflow Breccia (weathered)	Inactive
Serpentine	Inactive
Metasedimentary Rocks	Inactive

Source: Livingston 1976.

Other Geologic Constraints and Hazards

The Foresthill Divide is subject to avalanches, soil erosion and resulting sedimentation of nearby streams and rivers.

The combination of steep slopes, abundant snow, weather, snowpack, and an impetus to cause movement may create an avalanching episode. The Plan area has not been identified as a moderate or high avalanche hazard zone; however, avalanching episodes may occur. Placer County's avalanche management program works to identify Potential Avalanche Hazard Areas (PAHAs) in order to minimize risk.

Soils within the Plan area are subject to moderate to very high erosion hazard. Erosion can lead to other hazards including slope instability and sedimentation of nearby streams and rivers. Table 3.6-6 lists and describes soils prone to erosion.

Table 3.6-6
Soil Erosion Hazards

Soil	Erosion Hazard	Occurrence in Plan Area	Description
Andregg-Caperton-Sierra	Moderate to high		Undulating to steep, well drained and somewhat excessively drained soils that are deep to shallow over granitic rock
Auburn-Sobrante	Mod. to very high	X	Undulating to very steep, well-drained soils that are shallow or moderately deep over metamorphic rock
Cohasset-Aiken-McCarthy	Moderate to high	X	Undulating to steep, well-drained soils that are moderately deep to very deep over volcanic rock
Cohasset-Jocal-Holland	Mod. to very high		Very deep, nearly level to very steep, well-drained soils on ridgetops and mountainsides
Dubakella-Rock outcrop	Moderate to high	X	Rolling to steep, well-drained soils that are moderately deep over serpentine; also located on rock outcrop
Exchequer-Inks	Moderate to high		Undulating to steep, well-drained and

Soil	Erosion Hazard	Occurrence in Plan Area	Description
			somewhat excessively drained soils that are shallow over volcanic rock
Fugawee-Waca-Ahart	Moderate to high		Moderately deep, nearly level to very steep, well-drained, soils on mountainsides
Hurlbut-Deadwood-Putt	Moderate to high		Moderately deep and shallow, nearly level to very steep, well-drained soils on mountainsides
Mariposa-Josephine-Sites	Mod. to very high	X	Undulating to steep, well-drained soils that are shallow to deep over metamorphic rock
Maymen-Mariposa	Mod. to very high	X	Hilly to very steep, well-drained and somewhat excessively drained soils that are shallow or moderately deep over metamorphic rock
McCarthy-Crozier-Ledmount	Moderate to high	X	Moderately deep, nearly level to very steep, well-drained soils on ridgetops and mountainsides
Meeks-Tallac	Moderate to high		Nearly level to steep, well-drained to somewhat excessively drained soils that are deep to very deep over a pan
Tahoma-Jorge	Moderate to high		Gently sloping to steep, well-drained soils that are deep to very deep over latite and andesitic conglomerate
Tallac-Smokey-Meiss	Moderate to high		Deep and moderately deep and shallow, nearly level to very steep, moderately well-drained to somewhat excessively drained soils on moraines, outwash terraces, and mountainsides
Trojan-Kyburz-Portola	Moderate to high		Deep and moderately deep, level to very steep, well-drained soils on mountainsides
Umpa-Fugawee	Moderate to high		Gently sloping to steep, well-drained soils that are moderately deep over andesite and andesitic conglomerate
Waca-Meiss	Moderate to high		Strongly sloping to steep, well-drained and excessively drained soils that are moderately deep to shallow over andesite or andesitic tuff

Source: U.S. Natural Resource Conservation Service.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to vegetation, wetland and riparian areas, fish and wildlife habitat, agricultural resources, forest resources, water resources, soils, geology, open space, visual resources and conservation:

Vegetation

Goal 4.A.1. Promote and provide for the continued diversity and sustainability of the native vegetative resources throughout the Divide.

Policies

- 4.A.1-1 Encourage landowners and developers to manage the integrity of existing terrain and native vegetation, especially in visually-sensitive areas such as hillsides, ridges and along important transportation corridors, consistent with fire safety standards.
- 4.A.1-2 Require developers to use native species (and compatible non-invasive non-native species, where appropriate), especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits or for project mitigation.
- 4.A.1-3 Support the conservation of a healthy forest including outstanding areas of native vegetation, including, but not limited to, open meadows, oak woodlands and riparian areas.
- 4.A.1-4 Establish a vegetation management plan and program for the Foresthill Divide that includes, but is not limited to, maintaining a balance of thinning, maintenance and the reforestation of trees along road corridors.
- 4.A.1-5 Ensure that landmark trees and major stands or groves of native trees (such as the Todd's Valley Cemetery) are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.
- 4.A.1-6 Establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects.
- 4.A.1-7 Ensure the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife.
- 4.A.1-8 Support the management of wetland and riparian plant communities and forest-woodland (e.g. ponderosa pine stands, blue oak woodlands, and valley oak stands) for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored to a healthy forest environment or expanded, where possible.
- 4.A.1-9 Require that new development protect, restore, rehabilitate, and manage the native forest-woodlands to the maximum extent possible.
- 4.A.1-10 Require that development on hillsides be limited to maintain valuable native forest vegetation and to control erosion.
- 4.A.1-11 Encourage the planting of native trees, shrubs and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.
- 4.A.1-12 Encourage the utilization and protection of the natural forest in a way that maintains it in a healthy condition and at the same time provides for fire safety (low impact ground fires) in residential and developed areas (the wildland/rural intermix).
- 4.A.1-13 Support the continued use of prescribed burning and other methods of brush suppression to mimic the effects of natural fires to reduce fuel volumes and associated fire hazard to human residents and to enhance the health of biotic communities.
- 4.A.1-14 Support the preservation of native trees and the use of native seed sources and such seedlings and drought-tolerant plant materials in all revegetation/landscaping projects.
- 4.A.1-15 Require that new development avoid, as much as possible, ecologically fragile areas (e.g., areas of rare or endangered species of plants, riparian areas). Where feasible, these areas and heritage trees should be protected through public acquisition of fee title or conservation easements to ensure protection.

Wetland and Riparian Areas

Goal 4.A.2. Protect wetland communities and related riparian areas throughout the Plan area as valuable resources and encourage their creation and restoration.

Policies

- 4.A.2-1 Support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.
- 4.A.2-2 Require new development to mitigate wetland loss in both regulated and non-regulated wetlands to achieve "no net loss" within the Plan area through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.
- 4.A.2-3 Discourage direct runoff of pollutants and siltation into existing wetland areas from outfalls serving nearby development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.
- 4.A.2-4 Strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.
- 4.A.2-5 Require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques within the Plan area. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. Continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than-significant impact under CEQA.
- 4.A.2-6 Discourage open grazing or open confinement of livestock in riparian areas on the Foresthill Divide.

Fish and Wildlife Habitat

Goal 4.A.3. Protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policies

- 4.A.3-1 Identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:
- a. Wetland areas.
 - b. Stream environment zones.
 - c. Any habitat for rare, threatened or endangered animals or plants.
 - d. Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
 - e. Large areas of non-fragmented natural habitat, including Oak Woodlands and Valley Foothill Riparian.
 - f. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.

- 4.A.3-2 Require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.
- 4.A.3-3 Require the control of residual pesticides to prevent potential damage to water quality, vegetation, and wildlife.
- 4.A.3-4 Encourage private landowners to adopt sound wildlife habitat management practices, as recommended by California Department of Fish and Game officials, the U.S. Fish and Wildlife Service, and the Placer County Resource Conservation District.
- 4.A.3-5 Support preservation of the habitats of rare, threatened, endangered, and/or other special status species. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.
- 4.A.3-6 Support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or non-game species, through maintenance of habitat diversity.
- 4.A.3-7 Support the preservation or reestablishment of fisheries in the rivers and streams on the Foresthill Divide, whenever possible.
- 4.A.3-8 Require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other public purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.
- 4.A.3-9 Use the California Wildlife Habitat Relationships (WHR) system as a standard descriptive tool and guide for environmental assessment in the absence of a more detailed site-specific system.
- 4.A.3-10 The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed rare, threatened, or endangered plant and animal species.
- 4.A.3-11 The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland/riparian habitats, wildlife migration corridors, and locally-important species/communities.

Agricultural Resources

Goal 4.A.4. Encourage the retention of agricultural lands and provide for the long-term conservation of these lands whenever feasible.

Policies

- 4.A.4-1 The County shall protect agricultural areas from conversion to non-agricultural uses.
- 4.A.4-2 The County shall identify agricultural lands within the Plan area and protect these lands from incompatible development.
- 4.A.4-3 The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses, while balancing the preservation of the Divide's natural resources.
- 4.A.4-4 Maintain agricultural lands in large parcel sizes to retain viable agricultural units.
- 4.A.4-5 Encourage the concentration of development within or near the Core Area as an alternative to expanding urban boundaries into agricultural areas.

- 4.A.4-6 Encourage multi-seasonal use such as private recreational development, agricultural lands, and timberlands to enhance the economic viability.

Goal 4.A.5. Minimize existing and future conflicts between agricultural and non-agricultural uses in agriculturally-designated areas.

Policies

- 4.A.5-1 The County shall identify and maintain clear boundaries between residential and agricultural areas and require land use buffers specified in the Placer County General Plan between such uses where feasible. These vegetative buffers shall occur on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.
- 4.A.5-2 The fencing of subdivided lands adjoining agricultural uses shall be considered as a potential mitigation measure, when used in combination with vegetative buffers, to reduce conflicts between residential and agricultural uses. Factors to be considered in implementing such a measure include:
- a. The type of agricultural operation (i.e., livestock, orchard, timber, row crops);
 - b. The size of the lots to be created;
 - c. The presence or lack of fences in the area;
 - d. Existing natural barriers that prevent trespass; and
 - e. Passage of wildlife.

Forest Resources

Goal 4.A.6. Conserve Placer County's forest resources, enhance the quality and diversity of forest ecosystems, reduce conflicts between forestry and other uses, and encourage a sustained yield of forest products.

Policies

- 4.A.6-1 The County shall encourage the sustained productive use of forest land as a means of providing open space and conserving other natural resources.
- 4.A.6-2 The County shall discourage development that conflicts with timberland management and shall protect significant timber production lands from incompatible development (i.e., unrelated residential and other non-timber-related uses).
- 4.A.6-3 Work closely and coordinate with agencies involved in the regulation of timber harvest operations to ensure that County conservation goals are achieved.
- 4.A.6-4 Review all proposed timber harvest plans (THPs) and request that the California Department of Forestry and Fire Protection (CDF) amend THPs to address public safety and environmental concerns.
- 4.A.6-5 Encourage and promote the productive use of wood waste generated in the county.
- 4.A.6-6 Identify and maintain sustainable timberlands and forests.
- 4.A.6-7 Provide for both on-site and off-site forest-related industries while minimizing conflicts with adjacent uses.
- 4.A.6-8 The County shall maintain a low mathematical density of allowable development in Forestry areas in order to protect major areas of potential timber resources on the Divide from conversion to other more intensive uses.
- 4.A.6-9 The County shall encourage clustering of development in timberland areas within the Forest Residential land use designation to preserve timber resources for productive use.

- 4.A.6-10 The County shall encourage the use of the Timberland Production Zone for those lands which have significant commercial timber value.
- 4.A.6-11 The County shall encourage reforestation practices on timber harvest lands.
- 4.A.6-12 The provision of public facilities and services shall be limited in important timber areas on the Foresthill Divide.

Water Resources

Goal 4.A.7. Protect and enhance the natural qualities of the Foresthill Divide's streams, creeks and groundwater.

Policies

- 4.A.7-1 The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected including riparian zones, wetlands, old growth woodlands, and the habitat of rare, threatened or endangered species. Based on more detailed information supplied as a part of the review for a specific project, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:
- a. Reasonable use of the property would otherwise be denied;
 - b. The location is necessary to avoid or mitigate hazards to the public;
 - c. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
 - d. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.
- 4.A.7-2 The County shall require development projects proposing to encroach into a creek corridor or creek setback to do one or more of the following, in descending order of desirability:
- a. Avoid the disturbance of riparian vegetation;
 - b. Replace riparian vegetation (on-site, in-kind);
 - c. Restore another section of creek (in-kind); and/or
 - d. Pay a mitigation fee for restoration elsewhere in the Plan area.
- 4.A.7-3 Where creek protection is required or proposed, the County should require public and private development to:
- a. Preserve creek corridors and creek setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a creek is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
 - b. Designate such easement or dedication areas (as described in a. above) as open space;
 - c. Protect creek corridors and their habitat value by actions such as: 1) providing an adequate creek setback, 2) maintaining creek corridors in an essentially natural state, 3) employing creek restoration techniques where restoration is needed to achieve a natural creek corridor, 4) utilizing riparian vegetation within creek corridors, and where possible, within creek setback areas, 5) prohibiting the planting of invasive, non-native plants (such as vinca major and eucalyptus) within creek corridors or creek setbacks, and 6) avoiding tree removal within creek corridors;
 - d. Provide recreation and public access near creeks consistent with other *General Plan* policies;
 - e. Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water

pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.

- f. Provide for long-term creek corridor maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

- 4.A.7-4 Encourage the use of natural stormwater drainage systems to preserve and enhance natural features.
- 4.A.7-5 Support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state.
- 4.A.7-6 Consider using stormwater of adequate quality to replenish local groundwater basins, restore wetlands and riparian habitat, and irrigate agricultural lands. This should occur in an environmentally and aesthetically acceptable manner without construction of large dams or canals.
- 4.A.7-7 The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to: artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).
- 4.A.7-8 Continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and runoff from developed areas and to encourage the use of BMPs.
- 4.A.7-9 The County shall establish a water well monitoring program in areas with known or potential water quality problems or reduced yields, take action to mitigate water quality problems, and review development proposals in low water yield areas.
- 4.A.7-10 The County shall improve water quality by eliminating existing water pollution sources and by prohibiting activities which include the use of hazardous materials around wetland and groundwater recharge areas.
- 4.A.7-11 Where possible, view flood waters as a resource to be used for waterfowl habitat, aquifer recharge, fishery enhancement, agricultural water supply, and other suitable uses. This should occur in an environmentally and aesthetically-acceptable manner without construction of large dams or canals.
- 4.A.7-12 Preserve or enhance the aesthetic qualities of natural drainage courses in their natural or improved state compatible with flood control requirements and economic, environmental, and ecological factors.
- 4.A.7-13 Promote the use of natural or non-structural flood control facilities, including off-stream flood control basins, to preserve and enhance creek corridors.
- 4.A.7-14 Require flood-proofing of structures in areas subject to flooding.
- 4.A.7-15 Require flood control structures, facilities, and improvements to be designed to conserve resources, incorporate and preserve scenic values, and to incorporate opportunities for recreation, where appropriate.
- 4.A.7-16 Require that natural watercourses be integrated into new development in such a way that they are accessible to the public and provide a positive visual element.
- 4.A.7-17 Discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

- 4.A.7-18 Require project proponents to restore such areas by means of landscaping, revegetation, the use of rice straw or other weed-free vegetative material for erosion control measures, or similar stabilization techniques as a part of development activities where the stream environment zone has previously been modified by channelization, fill, or other human activity.
- 4.A.7-19 The County shall require that newly-created parcels include adequate space outside of watercourses' setback areas to ensure that property owners will not place improvements (e.g., pools, patios, and appurtenant structures) within areas that require protection.
- 4.A.7-20 The County shall protect groundwater resources from contamination and further overdraft, particularly those areas that rely on groundwater as their only domestic water source (e.g., Baker Ranch, Michigan Bluff, Old Todd's Valley, Spring Garden Road, etc.), by pursuing the following efforts:
- a. Identifying and controlling sources of potential contamination;
 - b. Protecting important groundwater recharge areas; and
 - c. Encouraging the use of surface water to supply major consumptive demands.
- 4.A.7-21 Open space located in watersheds which serve reservoirs is important to the adequate performance of those reservoirs for their intended purposes and should be preserved and protected.
- The watershed is defined as those lands draining into a reservoir and having an immediate effect upon the quality of water within that reservoir. Those lands located within the watershed and within 5,000 feet of the reservoir shall be considered as having an immediate effect.
- | | |
|---|---|
| <p>Key Reservoirs
 Sugar Pine Reservoir
 Big Reservoir</p> | <p>Key Watersheds
 American River
 Owl Creek</p> |
|---|---|
- 4.A.7-22 The County shall encourage the protection of floodplain lands and where appropriate, acquire public easements for purposes of flood protection, public safety, wildlife preservation, groundwater recharge, access and recreation.
- 4.A.7-23 The Foresthill Divide community shall work with the American River Watershed Group in their efforts to maintain and improve water quality within the watershed.

Soils

Goal 4.A.8. Promote the conservation of soils as a valuable natural resource.

Policies

- 4.A.8-1 The County shall support and encourage existing special district, state and federal soil conservation and restoration programs.
- 4.A.8-2 The County shall require slope analysis maps during the environmental review process, or at the first available opportunity of project review, to judge future grading activity, building location impacts, and road construction impacts.
- 4.A.8-3 Encourage the restoration/reuse of hydraulically mined areas.
- 4.A.8-4 Require the use of feasible and practical BMPs to minimize the effects of construction, logging, mining, recreation or other activities that could result in soil loss from dust generation and water runoff.

Geology

Goal 4.A.9. Minimize the loss of life, injury, and property damage due to seismic and geological hazards.

Policies

- 4.A.9-1 The County shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards (i.e., ground shaking, landslides, liquefaction, critically expansive soils, avalanche).
- 4.A.9-2 The County shall require submission of a preliminary soils report, prepared by a registered civil engineer and based upon adequate test borings, for every major subdivision and for each individual lot where critically expansive soils have been identified or are expected to exist.
- 4.A.9-3 The County shall prohibit the placement of habitable structures or individual sewage disposal systems on or in critically expansive soils unless suitable mitigation measures are incorporated to prevent the potential risks of these conditions.
- 4.A.9-4 The County shall ensure that areas of slope instability are adequately investigated and that any development in these areas incorporates appropriate design provisions to prevent landsliding.
- 4.A.9-5 In landslide hazard areas, the County shall prohibit avoidable alteration of land in a manner that could increase the hazard, including concentration of water through drainage, irrigation, or septic systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.
- 4.A.9-6 The County shall require the preparation of drainage plans for development in hillside areas that direct runoff and drainage away from unstable slopes.
- 4.A.9-7 In areas subject to severe groundshaking, the County shall require that new structures intended for human occupancy be designed and constructed to minimize risk to the safety of occupants.
- 4.A.9-8 The County shall continue to support scientific geologic investigations which refine, enlarge and improve the body of knowledge on active fault zones, unstable areas, severe groundshaking, avalanche potential and other hazardous conditions in Placer County.
- 4.A.9-9 The County shall require that the location and/or design of any new buildings, facilities or other development in areas subject to earthquake activity minimize exposure to danger from fault rupture or creep.
- 4.A.9-10 The County shall require that new structures permitted in areas of high liquefaction potential be sited, designed and constructed to minimize the dangers from damage due to earthquake-induced liquefaction.
- 4.A.9-11 The County shall limit development in areas of steep (in excess of 30%) or unstable slopes, or slope breaks to minimize hazards caused by landslides, liquefaction, construction undercutting or vegetation loss.
- 4.A.9-12 The County shall require septic leachfields and drainage plans during the environmental review process to direct runoff and drainage away from steep and/or unstable slopes.
- Goal 4.A.10. Recognize and protect valuable mineral resources for current and future generations in a manner that does not create land use conflicts.**

Policies

- 4.A.10-1 Protect valuable mineral deposits from intrusion by incompatible land uses that will impede or preclude mineral extraction or processing. Promote proper management of all mineral resource activities and minimize the impact of extraction and processing on neighboring activities and the environment in general.

Open Space

Goal 4.A.11. Preserve and enhance open space lands to maintain the natural resources of the county.

Policies

- 4.A.11-1 The County shall support the preservation and enhancement of natural land forms, native vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including open meadows, mixed conifer forests, wetlands preserves, riparian corridors, oak woodlands and floodplains.
- 4.A.11-2 The County shall require that new development be designed and constructed to protect, enhance, rehabilitate, and restore the following types of areas and features as open space to the maximum extent feasible:
- a. High erosion hazard areas;
 - b. Scenic and trail corridors;
 - c. Streams, streamside vegetation;
 - d. Wetlands;
 - e. Other significant stands of vegetation;
 - f. Wildlife corridors, and;
 - g. To coordinate open space desires with the fuel break system needs for public safety fire protection and access to manage wildfires.
- 4.A.11-3 The County shall support the maintenance of open space and natural areas that are interconnected and of sufficient size to protect biodiversity, accommodate wildlife movement, and sustain ecosystems.
- 4.A.11-4 The County shall encourage either private or public ownership and maintenance of open space.
- 4.A.11-5 The County shall coordinate with local, state, and federal agencies and private organizations to establish visual and physical links among open space areas to form a system that, where appropriate, includes trails. Dedication of easements shall be encouraged, and in many cases, required as lands are developed and built.
- 4.A.11-6 The County shall encourage the preservation of open space so as to enhance developed areas as well as to maintain the rural mountain character of the area and clear boundaries of the community.
- 4.A.11-7 The County shall prohibit the extraction of natural resources, except for water, from areas of dedicated open space except those that protect, rehabilitate, maintain and enhance the natural characteristics of such resources (i.e. fire protection, flood prevention, etc.).

Goal 4.A.12. Preserve, as much as possible, open space lands to maintain the natural resources and rural mountain characteristics of the area, and to protect wildlife habitats and other areas of major or unique ecological significance.

Policies

- 4.A.12-1 Encourage the preservation and enhancement of, and establish protective land use designations for, sensitive areas such as stream corridors, steep canyons and areas of significant natural resource value.
- 4.A.12-2 Require that natural open space buffers be maintained in non-riparian areas adjacent to drainage swales and creeks to reduce erosion and to aid in the natural filtration of run-off waters flowing into these waterways.
- 4.A.12-3 In cooperation with the Resource Conservation District, identify those segments of watersheds and wetlands affecting waterways important to water resource protection which are in need of rehabilitation through revegetation, and implement a plan for same. Wherever development removes

vegetation important to watersheds, require as a part of the environmental review process that revegetation methodologies for watershed protection be identified and implemented.

- 4.A.12-4 Encourage the retention and/or creation of open space in Foresthill. No land owner should be forced to sell or grant easements for open space purposes except as a condition of project approval and/or where a public safety concern exists.

Goal 4.A.13. Preserve and enhance open space for outdoor recreation, resource production and health and safety purposes.

Policies

- 4.A.13-1 Identify and encourage the development of recreation facilities compatible with the Plan area's rural lifestyle and environment.
- 4.A.13-2 Encourage the recreation and open space potential of water features, including reservoirs, natural streams and other waterways.
- 4.A.13-3 The County shall encourage open spaces to be linked visually and physically as much as possible to form a system of open spaces and recreational uses. Where appropriate, trails shall connect open space areas. Dedication of easements shall be encouraged or required as lands are developed and built.
- 4.A.13-4 The County shall encourage the preservation of agricultural lands as regional open space and protect these areas from the encroachment of development.
- 4.A.13-5 The County shall assure that removal of economic mineral resources does not conflict with surrounding land uses or the stated desire for maintaining the natural environment.
- 4.A.13-6 The County shall assure the removal of biomass and other commercial forest products is done under resource management planning.
- 4.A.13-7 The County shall require that areas hazardous to public safety and welfare be open or predominantly open. This category includes:
- a. Areas subject to landslide or with severe slope stability problems.
 - b. Streams and other areas subject to flooding from a 100-year storm.
 - c. Areas with extreme and high fire risk.

Visual Resources

Goal 4.A.14. Protect and maintain identified viewsheds and natural areas of special aesthetic quality along Foresthill roadways.

Policies

- 4.A.14-1 The well-recognized views of surrounding lands, ridges and canyons from public rights-of-way or lands shall be retained.
- 4.A.14-2 The views of proposed development from other properties shall be considered when making decisions on compatibility of the proposed development.
- 4.A.14-3 Ridge line development shall be carefully reviewed to ensure that proposed structures and lighting do not unduly intrude into the view-line of nearby roadways and properties.
- 4.A.14-4 The undergrounding of existing and new utility lines shall be encouraged.

- 4.A.14-5 Although not entirely within the Community Plan area, the following road segments shall be designated as scenic highways:
- a. Foresthill Road within the Plan area and to Robinson Flat;
 - b. Mosquito Ridge Road to Robinson Flat Road; and,
 - c. Robinson Flat Road from Mosquito Ridge Road to Foresthill Road.

Conservation

Goal 4.A.15. Promote water conservation and recycling efforts.

Policies

- 4.A.15-1 The County shall expand recycling programs on the Divide, including abandoned vehicle abatement.

3.6.3 IMPACT EVALUATION CRITERIA

Appendix G of the State CEQA Guidelines states that a project may be deemed to have a significant effect on hydrology and/or water quality if it would:

- Violate any water quality standards or waste discharge requirements
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
- Otherwise substantially degrade water quality
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam
- Result in inundation by seiche, tsunami, or mudflow

CEQA Guidelines (Section 15380) provide for including species not listed under the ESA and CESA to be treated as “rare or endangered” under the following circumstances:

- If the species’ survival and reproduction in the wild are in immediate jeopardy;
- If the species is existing in such small numbers throughout all or a significant portion of its range that it could become endangered if its environment worsens;
- If the species is likely to become endangered within the foreseeable future throughout all of a significant portion of its range and could be considered under the federal definition of “threatened;”
- If the project would result in the measurable degradation of sensitive habitats through filling, inundation, or other land use alteration.

Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Appendix G of the California Environmental Quality Act (CEQA) provides examples of impacts that would normally be considered for geology and soils. Based on these examples, a project will normally result in a significant impact if it will:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
 - Strong seismic ground shaking
 - Seismic-related ground failure including liquefaction, or
 - Landslides
- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
- The loss of, or loss of access to, mineral resources identified in a Mineral Resource Zone by the CDMG
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam
- Result in inundation by seiche, tsunami or mudflow

Impact analysis is based on a review of geologic and soils data prepared by the State Division of Mines and Geology, U.S. Geological Survey, and USDA Natural Resources Conservation Service (Unified Soil Classification System and tables summarizing the Engineering Properties and the Physical and Chemical Properties of mapped soils) which is pertinent to the Plan area. Seismic hazard impacts were analyzed according to published and unpublished data, and conclusions formed from the scientific community's current understanding of local and regional features.

3.6.4 IMPACTS AND MITIGATION MEASURES

3.6-1 Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

Soil units that meet the criteria for Prime Farmland and Farmland of Statewide Importance occur within the Plan area. They are located primarily at the top of the Foresthill Divide, along the Foresthill Road corridor.

The majority of the Plan area is designated for Public Ownership (53%), Agricultural/Timberland (23%) and Forestry (12.4%). The remaining lands (less than 12%) are designated for Rural Residential (parcel sizes ranging from 2.3 acres to 10 acres), Low and Medium Density Residential, Industrial, Development Reserve, Mixed-Use Areas and Historical Outlying Commercial Areas. Portions of these areas have existing development, and the policies of the FDCP are designed to discourage “leapfrog” development.

Due primarily to its elevation, the Plan area does not have an extensive agricultural heritage. A limited range of crops can survive within the Plan area, including walnuts, chestnuts and apples. A small (15± acres) walnut orchard, a chestnut orchard, and scattered vineyards and backyard apple plantings represent the bulk of existing agricultural activities in the Plan area. Although some soils in the Plan area can be rocky and/or shallow, there are no inherent soil conditions that would prevent agricultural production. Rather, the lack of extensive irrigation infrastructure and availability of richer agricultural lands elsewhere in the county are primary factors behind the lack of agricultural activity in the area, as well as small existing parcel sizes in areas with soils suitable for agricultural. Some recent interest has been shown in limited wine grape production in the Plan area.

The Plan also includes goals and policies to encourage the retention of agricultural lands, to protect them from conversion to non-agricultural uses, to encourage continued and expanded agricultural activities, to maintain agricultural lands in large parcel sizes, to encourage the concentration of development within or near the Core Area to avoid expanding urban boundaries into agricultural areas, and to protect agricultural lands from non-agricultural uses. The proposed FDCP land use designations and zoning are designed to avoid conversion of agricultural uses to non-agricultural uses. Proposed implementation measures offer further protection for agricultural lands. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-2 Conversion of timber lands to non-timber production use.

Coniferous forest represents the dominant vegetation community within the Plan area. The Plan area contains an interface between exclusive Placer County land use jurisdiction and the jurisdiction of the U.S. Forest Service, which is responsible for managing land uses and timber resources in the Tahoe National Forest. Additionally, the California Department of Forestry (CDF) has regulatory authority over timber harvest activities on privately held timber land under the Z’Berg Nejedly Forest Practices Act of 1973. Since the Plan area lies within an area designated as Very High Fire Hazard Area, CDF is also actively engaged in fuel reduction programs to reduce the high levels of brush and timber fuel loading that contribute to wildland fire hazard in the area.

Timber croplands represent approximately 33% of land within Placer County. Most of the timber croplands and lands under Timberland Production Zone (TPZ) are located east of Foresthill, although the Plan area contains more than 20 square miles of privately held timber land, including large holdings by Sierra Pacific Industries and Lone Star Timber Partners II.

The Forest Taxation Reform Act of 1976 requires nonfederal timber-producing lands to be classified by County ordinances into TPZs through a process involving the County Assessor, the County Planning Commission, and timber owners. Lands in TPZs may be used for growing forest products and compatible uses only, and property taxes on TPZ lands are based on those limited uses. Small scale commercial timber harvest still occurs on private lands in the Plan area, and is likely to continue in the future.

The goals and policies of the proposed FDCP are designed to protect and preserve existing forest and timber resources. A majority of the Plan area is designated for Public Ownership (53%), Agricultural/Timberland (23%) and Forestry (12.4%). Policy 4.A.6-2 calls for the County to discourage development that conflicts with timberland management and to protect significant timber production lands from incompatible development. Policy 4.A.6-8 requires the County to maintain a low mathematical density of allowable development in Forestry areas in order to protect major areas of potential timber resources on the Divide from conversion to other more intensive uses. Policy 4.A.6-9 calls for the County to encourage clustering of development in timberland areas within the Forest Residential land use designation to preserve timber resources for productive use, and Policy 4.A.6-10 encourages the use of the Timberland Production Zone for those lands which have significant commercial timber value. Finally, Policy 4.A.6-12 calls for the provision of public facilities and services to be limited in important timber areas on the Foresthill Divide. The proposed FDCP land use designations and zoning are designed to avoid conversion of productive timber lands to non-timber uses, and to allow other development to occur in a manner that does not conflict with timber-related uses. Nevertheless, the loss of productive or potentially productive timber resources through conversion of lands to developed uses represents a *potentially significant cumulative impact* of the proposed FDCP.

Mitigation Measure

No additional mitigation measures are available to reduce this impact to a less than significant level. Therefore, this impact will remain *potentially significant and cumulative*.

3.6-3 Alteration of views from scenic highways in the Plan area due to development in accordance with the proposed FDCP.

The FDCP designates the following road segments as local scenic highways:

- Foresthill Road within the Plan area and to Robinson Flat Road
- Mosquito Ridge Road to Robinson Flat Road
- Robinson Flat Road from Mosquito Ridge Road to Foresthill Road

Implementation of the FDCP will alter some views from the proposed local scenic highways. The forest vegetation and topography of the Plan area will limit the visibility of new development. The FDCP includes numerous goals and policies on the topic of community design that address the promotion, preservation and enhancement of the forested natural and rural atmosphere of the Plan area by requiring high aesthetic quality in all new development. All new development (including major remodeling and reconstruction) must comply with the Foresthill Community Design Guidelines (which are included in the FDCP), the Placer County Rural Design Guidelines, the Placer County Design Guidelines Manual, and the Placer County Landscape Design Guidelines. All new development must be designed to be compatible with the scale and character of the area. The gateway and scenic corridors that bring residents and visitors into the area must be protected and enhanced. Refer to Impact 3.3-1 for specific goal and policy statements that address the protection of visual and scenic resources in especially scenic areas. Additionally, Goal 4.A.14 and Policies 4.A.14-1 through 4.A.14-4 address protection of visual resources in the Plan area.

Compliance with the FDCP goals and policies, the Foresthill Community Design Guidelines, and other Placer County design guidelines will reduce the contribution of development to adverse impacts upon scenic vistas and views from scenic highways in the Plan area. It will assure that new development meets an aesthetic standard and open space retention that is not currently required along these roadway segments in the Plan area. Nevertheless, new development in the Plan area will contribute to long-term changes in views from these scenic highways from rural, forested views to views that encompass a greater level of development. This represents a *potentially significant impact*.

Mitigation Measure

No additional mitigation measures are available to reduce this impact to a less than significant level. Therefore, this impact will remain *potentially significant*.

3.6-4 Increased exposure of people and property to geologic hazards in the Plan area due to development in accordance with the proposed FDCP.

Implementation of the FDCP will allow development of new structures and will result in additional persons living and working in the Plan area, and visiting the Plan area. These people and structures will be subject to geologic hazards identified in the proposed FDCP. The Plan area is within the Melones fault zone; however, it is noted in the 1977 County Seismic and Safety Element that the central county area, which includes the Plan area, is the most stable area, formed on ancient granitic and metamorphic rock that contains no historically active faults. The Plan area does have the potential to be affected by shock waves resulting from earthquakes in western and eastern Placer County, as well as more distant areas that display greater seismic activity.

The canyon sides of the American River watershed are prone to sliding or slumping due to slopes in excess of 30 percent. There are several unstable rock units within the Plan area that have active deposits. In addition, the Foresthill Divide is subject to avalanches. The combination of steep slopes, abundant snow, weather, snowpack, and an impetus to cause movement may create

an avalanching episode. Placer County's avalanche management program works to identify Potential Avalanche Hazard Areas (PAHAs) in order to minimize the risk.

The proposed goals and policies of the FDCP address seismic and geologic hazards. Policy 4.A.9-1 calls for the County to require preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards. Policy 4.A.9-4 requires the County to ensure that areas of slope instability are adequately investigated and that any development in these areas incorporates appropriate design provisions to prevent landsliding. In landslide hazard areas, Policy 4.A.9-5 requires the County to prohibit avoidable alteration of land in a manner that could increase the hazard. In areas subject to severe groundshaking, Policy 4.A.9-7 calls for the County to require the location and/or design of any new buildings, facilities or other development in areas subject to earthquake activity minimize exposure to danger from fault rupture or creep. Policy 4.A.9-10 calls for the County to require that new structures permitted in areas of high liquefaction potential be sited, designed and constructed to minimize the dangers from damage due to earthquake-induced liquefaction. Finally, Policy 4.A.9-11 requires the County to limit development in areas of steep or unstable slopes, or slope breaks to minimize hazards caused by landslides, liquefaction, construction undercutting or vegetation loss. New construction is also required to comply with the Uniform Building Code, including seismic safety standards, which assures that new structures are safer than many existing structures. Implementation Measures in the FDCP offer additional protection from seismic and geologic hazards. Implementation of the proposed FDCP will result in increased safety from geologic hazards, landslides and liquefaction within the Plan area. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-5 Increased soil erosion and other soil-related hazards in the Plan area due to development in accordance with the proposed FDCP.

Impacts related to landslide and liquefaction are addressed in Impact 3.6-4 above. Shallow and serpentine soils are a limiting factor to development. Serpentine soils surround Todd's Valley and are located east of Foresthill, on Forest Service lands, and along McKeon-Ponderosa Road. Testing is now required by Placer County Environmental Health Services for projects that would disturb serpentine soils. This issue is addressed in Section 3.8, Air Quality. Portions of the Plan area are located over areas with shallow soils, especially the slopes of the North and Middle Fork American River.

Soils within the Plan area are subject to moderate to very high erosion hazard. Erosion can lead to other hazards, including slope instability and sedimentation of nearby streams and rivers. The proposed FDCP includes a goal to promote the conservation of soils as a valuable natural resource. It includes Policy 4.A.8-2, which calls for the County to require slope analysis maps during the environmental review process, or at the first available opportunity of project review, to judge future grading activity, building location impacts, and road construction impacts. It also includes Policy 4.A.8-4 to require the use of feasible and practical Best Management

Practices to minimize the effects of construction, logging, mining, recreation or other activities that could result in soil loss from dust generation and water runoff. Policy 4.A.12-2 requires that natural open space buffers be maintained in non-riparian areas adjacent to drainage swales and creeks to reduce erosion and to aid in the natural filtration of run-off waters flowing into these waterways. Proposed Implementation Measures add further protection, including #14, which requires site-specific studies to be prepared, including soil reports, slope analysis, grading plans, and erosion control and rehabilitation plans during the environmental review process. Implementation Measure #15 calls for development to be avoided on highly erosive soils and slopes over 15%, and Implementation Measure #16 calls for continued monitoring of mitigation measures that relate to accelerated erosion and attendant problems. Policies 4.A.7-3, 4.A.7-7, 4.A.7-8, 4.A.7-17, and 4.A.7-18 in the Water Resources section of the FDCP provide additional protection from soil erosion hazards.

Implementation of the proposed FDCP will result in reduced erosion hazards within the Plan area. However, because new development will occur in the Plan area, impacts related to soil erosion are considered *potentially significant*.

Mitigation Measure

In addition to compliance with the policies and implementation measures contained in the FDCP, implementation of the following measures will reduce the magnitude of potential topographic alteration and erosion impacts to a *less than significant level*:

3.6-5a *A geotechnical engineering investigation of proposed development sites shall be prepared by a qualified California-licensed civil engineer prior to any grading or other ground-disturbing activities. All site grading, trenching, cut and fill, engineered soils, and construction shall be in compliance with the recommendations of the geotechnical engineering investigation, including soil index, pH and resistivity testing, fill control, and proper design of cut and fill slopes.*

3.6-5b *Erosion and ground instability mitigation measures shall include conformance to Chapter A 33 of the 1997 edition of the Uniform Building Code and Placer County's Erosion and Sediment Control Ordinance. The required designs shall include methods to control soil erosion and ground instability. Measures to control soil erosion and mitigate potential differential settlement and construction related ground instability impacts include, but are not limited to, the following:*

- (1) *A California licensed civil engineer shall prepare a grading plan for proposed development sites.*
- (2) *A Notice of Intent (NOI) and supporting documents shall be submitted to the State Water Resources Control Board (SWRCB). A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for inclusion with construction plans and for regulation of construction activities on development project sites. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of storm water discharges and to describe and ensure the*

implementation of practices to reduce sediment and other pollutants in storm water discharges. The SWPPP must include Best Management Practices (BMPs) which address source reduction and sediment capture and retention.

- (3) *Uncemented silty soils are prone to erosion. According to requirements as set forth in Section 402(p) of the Clean Water Act as amended in 1987, and as administered by the SWRCB as described in (2) above, erosion control measures (appropriate Best Management Practices) shall be implemented during construction which conform to the National Pollutant Discharge Elimination System, Storm Drain Standards, and local standards.*

Any cut or fill slopes and their appurtenant drainage facilities shall be designed in accordance with Uniform Building Code guidelines and the Placer County Grading Ordinance. In general, soil slopes shall be no steeper than 2:1 (horizontal to vertical) unless authorized by a qualified professional. Any deviation from the 2:1 slope standard is subject to review and approval by the Department of Public Works. Slope angles shall be designed to conform to the competence of the material into which they are excavated.

- (4) *Parking facilities, roadway surfaces, and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems shall be designed where possible to divert natural drainage away from structures, to collect water concentrated by these surfaces, and to convey water away from the project site in accordance with the National Pollutant Discharge Elimination System, Storm Drain Standards, and Placer County standards.*
- (5) *Where structures are to be constructed between the rock, hardpan or dense soil exposed in a cut slope and engineered fill, a geotechnical study shall be prepared as detailed in Mitigation Measure 3.6-5a, and site specific soil engineering recommendations developed to mitigate this impact.*
- (6) *During construction, trenches greater than 5 feet in depth shall be shored, sloped back at a 2:1 slope angle, or be reviewed for stability by a qualified professional in accordance with the Occupational Safety and Health Administration regulations, if personnel are to enter the excavations.*

3.6-6 Increased exposure of people and property to flooding hazards in the Plan area due to development in accordance with the proposed FDCP.

Flooding can result in damage to the ecosystem, personal property, and can threaten life. Careful steps must be taken to avoid development in flood-prone areas and construction in flood plains. According to the Placer County General Plan Background Report, flooding due to excessive rainfall can occur in Placer County anytime between November and May. The 1981 Foresthill General Plan states:

Special flood hazard areas have recently been mapped in Placer County by the U.S. Department of Housing and Urban Development. According to their maps there are only two flood hazard zones within the plan area. The first is the Middle Fork of the American River which serves as the southern boundary for the plan. The second area is the North Fork of the American River running through the western portion of the plan area within the proposed Auburn Dam Take-line.

While the Plan area is prone to seasonal flooding, it is not located within a 100-year flood zone, as determined by Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs).

Dam failure presents additional flood hazards. Several reservoirs are located within or upstream of the Plan area. Failure of the French Meadows Dam could threaten an estimated 20 persons and could inundate French Meadows Road and Highway 49 on the North Fork of the American River. Sugar Pine Dam would not threaten persons unless recreationists were in the vicinity at the time of dam failure. Iowa Hill Road, Shirttail Canyon Road, and Yankee Jim's Road could all be inundated.

The proposed FDCP includes numerous goals and policies which address flooding hazards. At the same time, the Plan encourages the use of natural stormwater drainage systems to preserve and enhance natural features (Policy 4.A.7-4), and supports efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state (Policy 4.A.7-5). Policy 4.A.7-12 calls for the County to preserve or enhance the aesthetic qualities of natural drainage courses in their natural or improved state compatible with flood control requirements and economic, environmental, and ecological factors. Policy 4.A.7-13 promotes the use of natural or non-structural flood control facilities, including off-stream flood control basins, to preserve and enhance creek corridors. Policy 4.A.7-14 requires flood-proofing of structures in areas subject to flooding. Finally, Policy 4.A.7-22 calls for the County to encourage the protection of floodplain lands and where appropriate, acquire public easements for purposes of flood protection, public safety, wildlife preservation, groundwater recharge, access and recreation.

Because the Plan area does not include FEMA-designated flood zones, because the proposed Plan does not increase the potential for dam failure, and because the policies of the FDCP reduce potential flooding hazards within the Plan area, this impact is considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-7 Adverse impacts on water quality in the Plan area and downstream due to wastewater generated by development in accordance with the proposed FDCP.

As noted in the "Setting" discussion above, the Plan area is rich water resources, including relatively intact watersheds that provide the Foresthill Divide with an excellent source of drinking water, groundwater supplies that support private well systems on the Divide, and

surface waters that provide for fishing, recreation, and drinking water. The Plan area includes 222,360 acres along the North Fork American River and 394,181 acres along the Middle Fork American River. The Plan area contributes significantly to the larger American River Watershed. The Plan area is comprised of smaller watersheds, of which the Pagge Creek Watershed in the northeasternmost portion of the Plan area contributes the majority of drinking water.

The greatest potential threat to water quality within the Plan area is contamination from individual sewage disposal systems. There are no community sewer systems located within the Plan area. All wastewater disposal is by individual systems (some of which serve more than one dwelling unit or business). The only community sewerage systems (i.e., community leach fields, oxidation ponds) are those serving mobile home parks, two apartment complexes and four houses on one lot. Future growth will continue to be served by septic systems, unless required by the Placer County Environmental Health Services to connect to a community sewer system. Sewer systems may be necessary for development of higher densities that generate high sewage flows or concentrate large quantities of sewage in limited areas.

The effectiveness of septic systems remains limited in some areas by shallow soils, massive granitic rock complexes, and excessive slopes that are characteristic of the Plan area. The FDCP provides that the flat region running through the center of the Plan area be served by individual sewage disposal systems on parcel sizes of 2.3 acres or more. Large areas northwest and southwest of this flat area “are marginal to unacceptable for the proper functioning of individual sewage disposal systems,” and sewage systems should be located on parcels ranging from 4.6 to 20 acres or larger. There are areas within the Plan area, however, that do not have shallow soils and are suitable for individual septic systems, such as Todd’s Valley. Other areas may be suitable with the use of engineered septic systems. Soil suitability for septic systems has been taken into consideration in development of the FDCP and the assignment of land use densities in residential, commercial and industrial areas.

Continued use of a community water system is recommended for higher density areas within the Plan area in order to minimize the risk of nitrate contamination in private wells. A significant portion of the Plan area is located outside the Foresthill P.U.D. boundaries and other water system service areas, and cannot feasibly be connected to a community water system. However, most of these areas are not considered suitable for development.

The proposed FDCP includes numerous policies that address water quality and wastewater disposal. Policies 3.D.3-1 through 3.D.3-3 and Implementation Measures address the criteria and process for review and approval of on-site sewage treatment and disposal. Policies 3.D.4-4 and 3.D.4-5 address maintaining quality of drinking water supplies. Policies 4.A.7-9, 4.A.7-10, 4.7.A-20, 4.A.7-21 and 4.A.7-23 and Implementation Measures address more general water quality protection measures. Although these policies and implementation measures address water quality issues associated with on-site disposal systems, the Regional Water Quality Control Board (in their response to the Notice of Preparation, see Appendix A) has indicated that the County has inadequate design criteria for on-site domestic waste disposal systems. The Regional Board has found the Ordinance Governing Individual On-Site Sewage Disposal Systems (Placer County Code, Chapter 4, Subchapter 1, Section 4.45) does not meet the

Regional Board Guidelines for Waste Disposal From Land Developments (Guidelines) and therefore poses a significant impact. This conclusion is also based on the Regional Board's statement that the FDCP policies have not been submitted to them for review as required under Resolution No. 82-036 to waive Waste Discharge Requirements (WDRs) for septic tank/leachfield systems for large developments. Given the County ordinance does not meet the Guidelines and no additional mitigation has been proposed, the Regional Board believes that the FDCP threatens to degrade water quality. The Regional Board suggests that high density residential discharges can be mitigated with the development of effective community collection, treatment and disposal systems.

Based on the Regional Board's comments, although the FDCP does not propose that large developments utilize individual on-site systems, this impact is considered a *potentially significant cumulative impact*. However, it can be mitigated to a level that is *less than significant*.

Mitigation Measure

3.6-7a *The County shall modify its Ordinance Governing Individual On-site Sewage Disposal Systems to meet the Regional Board Guidelines for Waste Disposal From Land Developments and submit the adopted FDCP to the Regional Board for review as required under Resolution No. 82-036.*

3.6-7b *Add the following policy to the FDCP: On-site sewage systems shall participate in the approved County Operation, Maintenance and Monitoring program.*

3.6-8 Water quality in the Plan area may be degraded following site development by the introduction of urban pollutants including vehicle oils and greases, heavy metals on roads, parking lots, and driveways, fertilizers and pesticides used on site landscaping, and toxic compounds released from auto maintenance areas. Construction during wet or dry weather will affect water quality with increased sedimentation, operation and maintenance of construction vehicles, and storage of materials that could release contamination to surface waters.

Newly planted vegetation and newly paved roadways could result in long-term water quality degradation. The higher daily use of roads and parking areas would contribute vehicle oils and grease to stormwater discharge. In commercial, industrial and mixed use areas, stormwater runoff may convey a wide range of pollutants to receiving waters. Vehicles contribute oil, grease, and metals onto roads and parking lots. Excessive use of fertilizers, pesticides and herbicides on landscaping can also result in leaching of nutrients and toxic compounds into stormwater runoff. Such compounds are soluble and would not, therefore, be removed by the use of detention basins.

Uncontrolled, these urban pollutants can directly or indirectly affect aquatic life. High concentrations of toxins in runoff can be lethal to aquatic life; chronic, low levels may enter the food chain, affecting the long-term breeding success of populations and lower reproductive potential. Aquatic and wildlife habitat can also be adversely affected by the accumulation of

toxins, which can indirectly affect aquatic and wildlife resources. Direct discharge from developments could occur towards surface waters.

Pollutant levels are typically highest during late summer and fall when pollutants, previously bound to particulates in the sediments, are released during the first large rainfall event (“first flush”) of the season. Since pollutants are typically concentrated, the potential for toxic events are more likely during first flush events because the dilution factor is usually low.

Common pollutants found in urban runoff include trace metals (copper, lead, zinc, cadmium, chromium, arsenic and nickel), PCBs, oil and grease, nutrients, coliform bacteria, organic compounds, and sediment. Generally, the high level of metals can be traced to one of several urban sources, including vehicle operation and maintenance, atmospheric fall-out, and illegal sewage discharges.

Due to the increase in impervious surfaces and traffic trips in the Plan area, a substantial increase in urban pollutants would gradually occur in the watersheds over the life of the FDCP. Given the extent of proposed development and roadway improvements, the overall potential for generation of urban pollutants, and because drainage is ultimately conveyed into a potable water source, this potential for long-term water quality degradation is considered a ***potentially significant impact***.

Development and ultimate urbanization of Plan area improvements could result in water quality degradation over the duration of construction. Grading operations result in a loss of vegetation, exposing the soils to erosion, particularly in steep areas. The exposed soils could be carried by storm runoff during the rainy season to downstream waters resulting in sediment transport. These increased sediment loads could substantially degrade water quality in downstream drains, especially over the construction duration and buildout of the Plan area. In addition, the operation and maintenance of construction vehicles and equipment, the loading and unloading of construction materials, and construction waste could release contaminants that would be washed off by stormwater discharges. This increase in sediment loads and turbidity in local drains would be considered a ***potentially significant short-term water quality impact***.

Mitigation Measure

Implementation of the following mitigation measures will reduce long-term surface water quality impacts. However, because pollutant levels will not be reduced to pre-development levels, long-term impacts will remain *significant and unavoidable*.

- 3.6-8a *On-site detention basins shall be designed and constructed with new development as determined to be necessary by the Department of Public Works. These basins shall be constructed at the commencement of grading, and be maintained throughout the construction period to receive stormwater runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Sediment basins located downstream of known development shall be designed to accommodate anticipated sediment deposit that will be transported during subsequent phases of development.*

- 3.6-8b *Prior to approval of improvement plans for development projects in the Plan area, the developers shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain inlet clearing) to reduce long-term surface water quality impacts. Parking lot sweeping shall occur on a weekly basis, and storm drain inlet clearing shall occur semi-annually. The plan shall also include the installation of oil, gas and grease trap separators in the proposed parking lots. The developers shall develop a financial mechanism, to be approved by Placer County, which ensures the long-term implementation of the program.*

Best management practices (BMPs), such as detention ponds, wetlands, filters, and vegetated swales, have been shown to reduce urban pollutant levels in stormwater. A number of studies have been conducted over the past two decades regarding the pollutant removal effectiveness of urban stormwater BMPs. For example, wetland BMPs such as shallow marshes, extended detention wetlands, and ponded wetlands have demonstrated median removal rates of 77% for bacteria, 90% for hydrocarbons, including oil and grease, and 69% for cadmium. Ponds have demonstrated median removal rates of 57% and 73% for copper and lead, respectively. Filters have been shown to be 81% effective in removing hydrocarbons, including oil and grease, 80% effective in removing zinc, 87% effective in removing total suspended solids (TSS), and 66% effective in removing organic carbon, based on the median rates of a number of reported studies. Drainage swales have demonstrated median removal efficiencies of 81% for TSS, 67% for organic carbon, and 71% for zinc (Schueler 1997). All BMPs for water quality protection, source control, and treatment control shall be developed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbook (January 2003) for the applicable type of development and/or improvement. Provisions shall be included for long-term maintenance of BMPs.

- 3.6-8c *Projects subject to construction-related storm water permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) program shall obtain any required permits through the Regional Water Quality Control Board or Environmental Protection Agency.*
- 3.6-8d *Developers shall revegetate all disturbed areas. Revegetation undertaken from April 1 to October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided. It is the developer's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction. Where soil stockpiling or borrow areas are to remain for more than one construction season, proper erosion control measures shall be applied. Erosion control shall be provided where roadside drainage is off of the pavement, to the satisfaction of the Department of Public Works.*

New developments of 1 to 5 acres or larger are subject to a National Pollutant Discharge Elimination System (NPDES) permit. The purpose of the permit is to protect water quality from development that would discharge into Waters of the U.S. The need for an NPDES permit would be triggered with any application for development of one acre or greater in the Plan area.

In addition, private development projects are subject to Placer County Flood Control District and Placer County Public Works requirements, which require the submittal of an erosion control plan. The following measures reduce the significant impact of short-term surface water quality degradation that would occur during the development of the Plan area to a *less than significant level*:

- 3.6-8e *Prior to approval of improvement plans for projects of 1 acre or greater, the developer shall obtain from the State Water Resources Control Board a General Construction Activity Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of stormwater discharges during construction activities.*
- 3.6-8f *Prior to approval of improvement plans for all projects in the Plan area, the project developer shall submit to the Placer County Public Works Department, for review and approval, an erosion control plan consistent with the County's Grading, Erosion and Sediment Control Ordinance during environmental review. The erosion control plan shall indicate that proper control of siltation, sedimentation and other pollutants will be implemented per NPDES permit requirements and County ordinance standards. The plan shall address storm drainage during construction and proposed BMPs (Best Management Practices) to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to Placer County specifications. BMPs shall be implemented throughout the construction process.*

Best Management Practices for construction shall be developed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbook (January 2003).

3.6-9 Reduction in available surface and ground water supplies due to development in accordance with the proposed FDCP.

Within the Plan area, water is supplied by a combination of private wells and community water systems. The Foresthill P.U.D. provides domestic water supply for Todd's Valley and Foresthill, and Baker Ranch Water District provides domestic water supply for the existing mobile home park. Michigan Bluff Water District supplies the Michigan Bluff community. Many individual parcels are supplied with pumped groundwater from individual wells.

Foresthill P.U.D. supplies 2,800 acre feet of water from BLM-owned Sugar Pine Reservoir, and supplements the supply with an additional 200 acre feet from two domestic wells. According to the District, current supply is more than adequate to serve existing development and a buildout population of 13,500 (not all of whom would receive community water). The BLM originally designed the reservoir for eventual capacity expansion; the dam could potentially be raised an additional 4 to 5 feet to accommodate an additional 4,000 to 5,000 acre feet. However, it is important to note that the expansion of facilities would not occur without significant environmental impact, and would submerge existing recreational facilities around the reservoir. Water service to the P.U.D. service area does not rely on increasing the capacity of the reservoir.

The proposed FDCP includes policies that encourage water conservation and groundwater recharge, and includes other policies that address water supply. Policy 3.D.4-1 requires all new development to demonstrate the availability of a long-term, reliable water supply. Policy 3.D.4-2 requires higher density development to rely on public water systems, and developments containing parcel sizes of one acre or less are required to connect to a treated water supply. Individual wells may be permitted when parcels are larger than one acre and no public water system exists or can be extended to the property. Policy 3.D.5-1 requires the County to ensure that an adequate quality and quantity of water is delivered to residents of the Foresthill area.

Although development in accordance with the proposed FDCP will utilize additional surface and ground water supplies, with the implementation of the Plan policies, the available water resources are adequate to serve the Plan area population without an adverse effect on those resources. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-10 Adverse impacts on special-status plants in the Plan area due to development in accordance with the proposed FDCP.

Special-status plant species including Butte County fritillary, Layne's ragwort, nissenan manzanita, Stebbins's phacelia, saw-toothed lewisia, woolly violet, Red Hills soaproot, Pine Hill flannelbush, and Stebbins's morning glory have the potential to occur within the Plan area. These plants are afforded special protection in the CEQA review process and are considered sensitive local resources in Placer County. Habitats supporting conditions suitable for these species should be considered sensitive, and as such should be surveyed prior to project development in these areas. If some or all of these species are found in areas proposed for development, the appropriate resource agencies should be contacted and, if possible, those areas should be avoided.

The proposed FDCP includes the following policies that address this impact:

- 4.A.1-6 Establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects.
- 4.A.1-15 Require that new development avoid, as much as possible, ecologically fragile areas (e.g., areas of rare or endangered species of plants, riparian areas). Where feasible, these areas and heritage trees should be protected through public acquisition of fee title or conservation easements to ensure protection.
- 4.A.3-1 Identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:
 - a. Wetland areas.
 - b. Stream environment zones.
 - c. Any habitat for rare, threatened or endangered animals or plants.
 - d. Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.

- e. Large areas of non-fragmented natural habitat, including Oak Woodlands and Valley Foothill Riparian.
- f. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.

In addition to these policies, Implementation Measure #3 requires that reconnaissance-level biological surveys be conducted for all new development proposals on undeveloped land. Protocol surveys and mitigation is required if indicated by the survey results. If indicated by reconnaissance surveys, Implementation Measure #5 requires that site-specific evaluations be performed at the appropriate time of year to determine the presence or absence of rare, threatened, or endangered species of plants or animals. Such evaluation must consider the potential for significant impact on these resources, and will identify feasible measure(s) to mitigate such impacts. Implementation of the policies and implementation measures of the FDCP will assure that potential impacts on special-status plant species will be *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-11 Adverse impacts on special-status avian species in the Plan area due to development in accordance with the proposed FDCP.

Special-status avian species including bald eagle, Northern goshawk, western burrowing owl, black swift, American peregrine falcon, California spotted owl, and tricolored blackbird may utilize the planning area for foraging and nesting habitat. The nests of raptors, including bald eagle, Northern goshawk, western burrowing owl, American peregrine falcon, and California spotted owl, as well as the nests of migratory bird species, which include these raptor species in addition to black swift and tricolored blackbird, are protected under the Migratory Bird Treaty Act (MBTA). Active raptor nests are also afforded additional protection in the California Fish and Game Code 3503.5. As such, proposed development within areas supporting suitable nesting habitat (coniferous forest, montane hardwood, chaparral, annual grassland, and blue oak woodland) for any or all of these species must be surveyed prior to construction to determine the presence/absence of these species nesting within the site. If any or all of these species are found actively nesting within an area proposed for development, construction activities within 500 feet of the nest location must be limited.

The proposed FDCP includes the following policies that address this impact:

- 4.A.3-1 (see Impact 3.6-9 above.)
- 4.A.3-2 Require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

In addition to these policies, Implementation Measures #3 and #5 described in Impact 3.6-9 further address this impact. However, because they do not include specific references to

limitation of construction activities, this impact is considered *potentially significant*. It can, however, be mitigated to a level that is *less than significant*.

Mitigation Measure

Implementation of the following mitigation measure will reduce this impact to a *less than significant level*:

3.6-11 *If any or all of the special-status avian species listed in Impact 3.6-11 are found actively nesting within an area proposed for development within the Plan area, no construction activities shall occur within 500 feet of the nest location. Construction activities may resume within this buffer zone after the young have fledged from the nest and the nest is abandoned for that breeding season.*

3.6-12 Adverse impacts on special-status mammal species in the Plan area due to development in accordance with the proposed FDCP.

Special-status mammal species that have the potential to occur within the Plan area include pine marten, Sierra Nevada showshoe hare, Sierra Nevada red fox, pacific fisher, and numerous bat species including greater western mastiff bat, spotted bat, small-footed myotis bat, long-eared myotis bat, fringed bat, long-legged myotis bat, and Yuma myotis. These species may utilize the Plan area for shelter, foraging, and breeding habitat. Because these species are sensitive to federal, state, and/or local resource agencies, focused surveys for these species should be conducted prior to the approval of any project that may remove or fragment suitable habitats for these species. If any or all of these species are observed during the focused surveys, or if evidence of these species is found within the survey area, the appropriate resource agency should be contacted and effective management strategies should be developed to protect these species and their associated habitats.

The proposed FDCP includes Policy 4.A.3-1 and Implementation Measures #3 and #5 (cites in Impact 3.6-9 above). Implementation of the policies and implementation measures of the FDCP will assure that potential impacts on special-status mammal species will be *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-13 Adverse impacts on special-status amphibian species in the Plan area due to development in accordance with the proposed FDCP.

California red-legged frog, mountain yellow-legged frog, foothill yellow-legged frog, and northwestern pond turtle could utilize the rivers, streams, and/or open water habitats throughout the Plan area. Additionally, western spadefoot toads may utilize annual grassland habitat with adjacent seasonal wetlands, and California horned lizard may occur in habitats supporting suitable soil conditions throughout the Plan area. The status of these species is of concern to federal, state, and/or local resource agencies. Consequently, prior to approval of projects

proposing to affect suitable habitat for these species, a focused survey should be conducted to determine the presence/absence of these species within the project area. If one or any of these species is found within the survey area, the appropriate resource agency should be contacted and species-specific management strategies should be developed to ensure the protection of the species and their associated habitat.

The proposed FDCP includes the following policies that address this impact:

- 4.A.1-15 (see Impact 3.6-9 above)
- 4.A.2-2 Require new development to mitigate wetland loss in both regulated and non-regulated wetlands to achieve “no net loss” within the Plan area through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.
- 4.A.3-1 (see Impact 3.6-9 above)
- 4.A.3-2 Require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.
- 4.A.3-8 Require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other public purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.

In addition to these policies, the proposed FDCP includes Implementation Measures #3 and #5 (cited in Impact 3.6-9 above), as well as #6, which requires a minimum 100 foot non-development setback from the centerline of all perennial streams and a minimum 50 foot setback from the centerline of intermittent streams are required for all development projects. Implementation of the policies and implementation measures of the FDCP will assure that potential impacts on special-status amphibian species will be *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-14 Adverse impacts on special-status fish species in the Plan area due to development in accordance with the proposed FDCP.

No listed anadromous fish species are likely to occur within the Plan area due to obstructions (i.e., Folsom Dam, Nimbus Dam) in the southern reaches of the American River. Additionally, the remaining special-status fish species listed in Table 3.6-2 are not likely to occur within the Plan area due to obstructions in the southern reaches of the American River and habitat/range limitations. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-15 Adverse impacts on special-status invertebrate species in the Plan area due to development in accordance with the proposed FDCP.

Three invertebrate species (spiny rhyacophilan caddisfly, Yates' snail, and valley elderberry longhorn beetle) have the potential to occur within the Plan area. The spiny rhyacophilan caddisfly is known from one stream within the Plan area, and may occupy additional streams and rivers in reaches supporting cool flowing water conditions. Projects having the potential to affect the water quality of these water features could affect this species. Consequently, surveys for this species should be conducted prior to the approval of projects that may affect water quality in this region. If this species is found within the Plan area, measures should be taken, in consultation with the USFWS, to ensure that the water quality is not altered in a manner that would adversely affect this species.

Yates' snail could potentially occur on limestone outcroppings or in caves within the Plan area. Prior to the approval of proposed projects within the Plan area, a survey should be conducted to determine if suitable habitat for this species occurs within the project site. If suitable habitat is found, a focused survey for this species should be conducted to determine the presence/absence of this species within the project area. If this species is determined to occur onsite, and the proposed development cannot avoid these areas, consultation with the USFWS would be required to determine appropriate conservation/management strategies for this species.

Valley elderberry longhorn beetle could occur in association with elderberry shrubs within the Plan area. To date, no known occurrences of valley elderberry longhorn beetle are recorded within the Foresthill Divide vicinity, and no known focused surveys for elderberry shrubs have been conducted within the Plan area. Prior to the implementation of a proposed project within the Plan area, a focused survey for elderberry shrubs should be conducted to determine the presence/absence of shrubs on the project site. If elderberry shrubs are found, these locations should be avoided. If shrubs cannot be avoided, consultation with the USFWS will be required to determine appropriate mitigation strategies.

The proposed FDCP includes Policies 4.A.1-6, 4.A.3-1, 4.A.3-2, 4.A.3-8, as well as Implementation Measures #3, 5 and 6 (cited in Impacts 3.6-9 and 3.6-12 above). Implementation of the policies and implementation measures of the FDCP will assure that potential impacts on special-status invertebrate species are *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-16 Adverse impacts on jurisdictional waters of the United States in the Plan area due to development in accordance with the proposed FDCP.

Jurisdictional waters of the U.S., including the North Fork of the American River and associated tributaries, Sugar Pine Reservoir, and Big Reservoir, occur in the Plan area. Several streams, ponds, and intermittent drainages are also located within the Plan area. These water features have not been delineated, and additional jurisdictional wetlands or waters of the U.S. may occur within the Plan area. Consequently, a wetland delineation must be conducted and verified by the U.S. Army Corps of Engineers prior to development of any project proposed within the Plan area. Encroachment into areas protected under Corps jurisdiction will require authorization from the Corps, and may require Regional Water Quality Control Board (RWQCB) water quality certification and a CDFG Streambed Alteration Agreement.

The proposed FDCP includes the following goal and policies that address this impact:

Goal 4.A.2. Protect wetland communities and related riparian areas throughout the Plan area as valuable resources and encourage their creation and restoration.

- 4.A.2-1 Support the “no net loss” policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.
- 4.A.2-2 Require new development to mitigate wetland loss in both regulated and non-regulated wetlands to achieve “no net loss” within the Plan area through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.
- 4.A.2-5 Require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques within the Plan area. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. Continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than-significant impact under CEQA.

Additionally, the FDCP includes Policies 4.A.3-1, 4.A.3-2, and 4.A.3-8 and Implementation Measures #3, 5 and 6 (cited in Impacts 3.6-9 and 3.6-12 above). The FDCP also includes Implementation Measure #7, which requires implementation of the Placer County Stream Management Guidelines and wetland banking program in the Plan area, and Implementation Measure #8, which requires implementation of the County’s guidelines for creek maintenance practices that ensure native vegetation is not removed unnecessarily in the Plan area. Implementation of the policies and implementation measures of the FDCP will assure that potential impacts on jurisdictional wetlands are *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.6-17 Adverse impacts on riparian habitat in the Plan area due to development in accordance with the proposed FDCP.

Riparian habitats support numerous plant and wildlife species and are considered a sensitive habitat in provisions of the Placer County General Plan (Policy 6.A.1). Projects that propose encroachment into these areas must follow the guidelines presented in the Placer County General Plan and may require a Streambed Alteration Agreement with the CDFG.

The proposed FDCP includes Policies 4.A.2-1, 4.A.2-2, 4.A.2-5, 4.A.3-1, 4.A.3-2, and 4.A.3-8, as well as Implementation Measures #3, 5, 6, 7 and 8 (cited in Impacts 3.6-9, 3.6-12 and 3.6-15 above). The FDCP also includes the following policies that address this impact:

- 4.A.7-1 The County shall require the provisions of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected including riparian zones, wetlands, old growth woodlands, and the habitat of rare, threatened or endangered species. Based on more detailed information supplied as a part of the review for a specific project, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:
- a. Reasonable use of the property would otherwise be denied;
 - b. The location is necessary to avoid or mitigate hazards to the public;
 - c. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
 - d. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.
- 4.A.7-2 The County shall require development projects proposing to encroach into a creek corridor or creek setback to do one or more of the following, in descending order of desirability:
- a. Avoid the disturbance of riparian vegetation;
 - b. Replace riparian vegetation (on-site, in-kind);
 - c. Restore another section of creek (in-kind); and/or
 - d. Pay a mitigation fee for restoration elsewhere in the Plan area.
- 4.A.7-3 Where creek protection is required or proposed, the County should require public and private development to:
- a. Preserve creek corridors and creek setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a creek is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
 - b. Designate such easement or dedication areas (as described in a. above) as open space;
 - c. Protect creek corridors and their habitat value by actions such as: 1) providing an adequate creek setback, 2) maintaining creek corridors in an essentially natural state, 3) employing creek restoration techniques where restoration is needed to achieve a natural creek corridor, 4) utilizing riparian vegetation within creek corridors, and where possible, within creek setback areas, 5) prohibiting the planting of invasive, non-native plants

- (such as vinca major and eucalyptus) within creek corridors or creek setbacks, and 6) avoiding tree removal within creek corridors;
- d. Provide recreation and public access near creeks consistent with other General Plan policies;
- e. Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.
- f. Provide for long-term creek corridor maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

Implementation of the policies and implementation measures of the FDCP will reduce potential impacts on riparian habitat in the Plan area. However, because new development will occur that may affect riparian habitat, this impact is considered *potentially significant and unavoidable*.

Mitigation Measure

No additional mitigation measures are available. Therefore, this impact will remain *potentially significant and unavoidable*.

3.6-18 Adverse impacts on wildlife movement corridors/deer migration corridors in the Plan area due to development in accordance with the proposed FDCP.

Wildlife movement corridors are essential to the distribution of wildlife, providing a means of movement throughout ranges that are encroached with human disturbances. Because a majority of the habitats within the Plan area is relatively undisturbed, these areas provide a means for wildlife movement throughout the Plan area. Further development within these areas will fragment this habitat and may result in obstructing this movement corridor. The effect on deer migration and wildlife movement should be analyzed prior to the approval of any proposed development within the Plan area. The analysis should include consultation with the CDFG and local resource agencies to properly evaluate the current wildlife movement and deer migration patterns in the Plan area.

The FDCP includes the following policies that address this impact:

- 4.A.1-7 Ensure the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife.
- 4.A.3-1 Identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:
 - a. Wetland areas.
 - b. Stream environment zones.
 - c. Any habitat for rare, threatened or endangered animals or plants.
 - d. Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
 - e. Large areas of non-fragmented natural habitat, including Oak Woodlands and Valley Foothill Riparian.

- f. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
- 4.A.3-2 Require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.
- 4.A.3-4 Encourage private landowners to adopt sound wildlife habitat management practices, as recommended by California Department of Fish and Game officials, the U.S. Fish and Wildlife Service, and the Placer County Resource Conservation District.
- 4.A.3-10 The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed rare, threatened, or endangered plant and animal species.
- 4.A.3-11 The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland/riparian habitats, wildlife migration corridors, and locally-important species/communities.

Implementation of these policies will reduce impacts on wildlife movement corridors/deer migration corridors in the Plan area. However, because new development will occur that may affect wildlife movement corridors, this impact is considered *potentially significant and unavoidable*.

Mitigation Measure

No additional mitigation measures are available. Therefore, this impact will remain *potentially significant and unavoidable*.

3.6-19 Cumulative adverse impacts on common resident and migratory wildlife species in the Plan area due to development in accordance with the proposed FDCP.

As noted in the “Setting” discussion, the Plan area supports habitat for numerous common resident and migratory wildlife species (i.e., California ground squirrel, raccoon, opossum, blacktail jackrabbit, black bear, etc.). The continuous expansion of urban development encroaches into habitats utilized by these species. The FDCP incorporates and encourages efforts to minimize encroachment into currently undisturbed habitats. Because these common species are not formally protected under the federal or state endangered species acts, cumulative impacts on these species are considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.7 CULTURAL RESOURCES

3.7.1 INTRODUCTION

A Heritage Resource Element was prepared for the FDCP by Susan Lindstrom, Ph.D., Consulting Archaeologist. The Element is incorporated in the text of the Setting and Impacts and Mitigation Measures sections below. The appendices (minus confidential appendices) are included as Appendix B of this EIR.

3.7.2 SETTING

PURPOSE

The purpose of the Cultural Resources section of the FDCP is the identification and, to the extent possible, preservation of archaeological and historical resources in the Plan area. The Foresthill Divide Community Plan area contains a rich heritage that is marked by numerous archaeological and cultural properties. Heritage resources are being lost to natural deterioration and to development-related impacts. Heritage resources are especially at risk as the Plan area assumes an increasing role as a “bedroom” community for Auburn and Sacramento. Incoming residents and visitors, and the new construction designed to accommodate them, may compromise the rich sense of heritage and unique historical identity of the Plan area. An appreciation of the heritage of the Foresthill Divide will engender the preservation and rejuvenation of old Foresthill and its surroundings and insure that both long-term and incoming residents and visitors to Foresthill can appreciate the area where they have chosen to live and visit. Historic structures are also an important visual element of the Foresthill Divide. The goals and policies which follow are intended to assure that future generations will have the opportunity to form a sense of community pride and identity from the achievements of the people that lived before them.

DISCUSSION

The following physical and cultural background draws heavily from contexts presented in the “Historical, Architectural, and Archaeological Resources of Placer County, California” (Terhorst and Gerike 1992) and in work by Baker (2000), Baker and Shoup (1992), and Baker, Shoup and Brack (1993) associated with the Highway 124 Project. Further information is taken from Carlson’s (1986) ethnographic overview and Markley and Henton’s (1985) prehistoric overview of the Tahoe National Forest. Details regarding the physical and cultural setting of the Foresthill Divide are found in these sources and will not be repeated here. References cited in this section are listed in Appendix D of the FDCP.

Physical Setting

The Foresthill Divide is a long northeast-trending ridge system separating the North and Middle Forks of the American River. The ridge ranges in width from two to ten miles. As one of the major east-west ridge systems of the north-central Sierra Nevada, the Divide would have provided relatively easy access for prehistoric populations moving east and west over the crest. However, the

steep canyons and rugged terrain to the north and south of the Divide may have been a barrier to travel and trade, and ultimately contributed to cultural conservatism and the development of local identities and differences, which included basic technology and economic and settlement patterns (Baker 2000:281). The Foresthill Divide has been sculpted by tectonic forces and stream erosion. During times of glacial advances, Sierran streams steepened their channels, creating steep slopes and tributary canyons and destabilizing riverside banks. It is during these times that ridgetop village sites may have been preferable to village locales along streams. Ridges were also the preferred locales for Euroamerican settlements and ranchlands.

Rocks in the Foresthill region represent a geologic history spanning nearly 300 million years. The rocks underlying the Divide are part of the Mother Lode Belt and include slates and shales of the Mariposa Formation. The Mariposa Formation is composed of ancient seafloor sediments. These sedimentary rocks are associated with underlying volcanic rocks of the Logtown Ridge Formation. The flat ridge of the Foresthill Divide is formed by a complex system of Tertiary channels capped by lavas that are included within the Mehrten Formation and categorized as andesite mud-flows. The underlying ancient Tertiary river channels contain auriferous deposits that were the focus of hydraulic and drift mining for gold by incoming Euroamericans. Prehistoric populations also appear to have had detailed knowledge of these geological deposits (Baker 2000:10). For example, the complex geology of the Foresthill Divide region provided a variety of stone for tool manufacture, including slate and schist, chert, and igneous and metamorphic materials. In addition, basalt and obsidian were brought or traded into the area from source locations as far as the Truckee-Tahoe Basin, Bodie Hills, Napa, and locales in northeast California and northwest Nevada. Also, prehistoric populations visited salt marshes near Cool and salt springs near Lincoln and mined quartz crystal quarries in the Middle Fork Canyon for toolstone and ceremonial use, and red and yellow ochre near Clipper gap for ornamentation and rock art.

The Mediterranean climate of the Plan area is characterized by hot summers and cool winters, with most precipitation falling during the winter. The Plan area receives little snow, as the winter snow line on the Divide is around 3,000 feet in elevation. The North and Middle Forks of the American River form the major hydrological features; fresh water sources are relatively abundant on top of the Divide. Rivers cut steep canyons up to 1,000 feet below the top of the Divide that presented major obstacles for both prehistoric and historic populations traveling off of the Divide.

The Plan area spans an elevation range roughly between 600 and 4,800 feet and encompasses several major life zones that gradually change with increasing altitude. Mountain ridges are colonized by mixed forests, oaks, shrubs, grasslands, and meadows--habitat for diverse faunal resources. The rich array of plants and animals were of subsistence and economic importance to both aboriginal inhabitants and incoming Euroamericans.

Prehistory and the Native American Period

Clear boundary determinations for Native American residents along the Foresthill Divide are confounded by the complete disruption of aboriginal cultures by early Euroamericans and of traditional practices involving inter-group trade, politics, marriage, and ritual. The Foresthill Divide lies firmly within the traditional territory of the Hill Nisenan (or Southern Maidu), a Penutian speaking group that inhabited the west-central Sierra Nevada. The Divide is peripheral land used by

the Washoe, Hokan language speakers who chiefly occupied the west-central Great Basin along the eastern Sierran flank and its crest (Beales 1933; d'Azevedo 1966; Levey 1978; Littlejohn 1928). After historic contact, Northern Miwok, also Penutian speakers, may have resided here; Northern Miwok currently reside in the Plan area. The Hill Nisenan held territory in the foothill and mountainous portions of the Yuba, Bear and American rivers, and the lower drainages of the Feather River. The Hill Nisenan recognized three divisions within their group based on slight linguistic and cultural differences. The Foresthill people belonged to one of the subgroups with its "center of influence" at Auburn (Littlejohn 1928:15). Nuclear Washoe tribal lands were about 2,000 square miles surrounding Lake Tahoe, with much larger peripheral lands having flexible, undefended boundaries. The area between snowline on the west Sierra slope and the Sierran crest was shared between the Nisenan and Washoe. Tradition holds that the Washoe and Nisenan had contact at Westville, east and upslope of the Plan area, and that encounters were not always friendly.

Environmental phenomena such as springs and drainages, unique geological outcrops, and different land surface exposures with variable slopes created extreme variety in the accompanying plant and animal communities upon which aboriginal populations depended. Like most hunters and gatherers, vegetable foods formed the subsistence baseline, although they used a wide range of plant and animal species. Generally, the least productive time of the year for both the Hill Nisenan and Washoe was late winter-early spring. Hill Nisenan caught salmon during spring runs up the North and Middle Forks of the American Rivers and their tributaries. Throughout the summer, both groups gathered nuts and seeds, roots, berries, fungi, and greens. Expeditions to hunt large game took place within the higher elevations during the fall. Acorns became available in massive quantities in the autumn. Acorn eating is the hallmark of California Indians and they were the primary staple for those groups who inhabited the western foothills of the Sierra. The Washoe went to great lengths to obtain acorns in trade from their western neighbors.

Lower elevations encompassed by the Plan area were occupied on a permanent or semi-permanent basis, with higher elevations inhabited at various times of the year by smaller groups that made seasonal movements in order to procure economic resources as they became available. The archaeological imprint of these ancient subsistence activities are distinctive, with diverse environmental zones closely corresponding to a variety of specific site types, such as villages, multi-task camps, task-specific locales, and special use areas.

Hill Nisenan villages and year-round encampments were clustered in the lower elevations of the Plan area. Villages were usually placed on ridge tops and on large flats along major streams. Permanent villages are represented archaeologically by culturally enriched and darkened soils (or "midden") which contain artifacts, charcoal, organic debris, and/or house pit and dance house depressions. Villages hosted important social gatherings and religious ceremonies. Dances to celebrate seasonal events and honor ancestors and deities were held in large semi-subterranean dance houses (the Todd's Valley Miwok-Maidu Cultural Foundation is currently planning construction of a new dance house near Foresthill.) Hill Nisenan villages consisted of from 4 to 12 separate dwellings, housing a nuclear or polygamous family. Larger social organizations, called "tribelets", were formed by several villages uniting under a single chief. Tribelet boundaries were marked by natural ridges between streams. No permanent Nisenan winter village occupation is reported above approximately 4,000 feet elevation on the western slope.

The Washoe generally wintered in the Truckee Meadows area on the east slope of the Sierra and spent summers in the higher elevations in and around the Truckee-Tahoe Basin and west of the crest. Compared to the Hill Nisenan, the Washoe were a relatively informal and flexible political collectivity. While semi-permanent villages were maintained along the eastern Sierran front, the Washoe as a whole were more mobile than the Nisenan, and the Washoe have a tradition of making long treks across the Sierran passes to hunt and gather acorns and to trade with Maidu and Miwok neighbors.

At seasonal base camps, the occupation by fewer people for briefer periods of time precluded the buildup of deep midden deposits. Such seasonal camps are manifest archaeologically by a wide range of cultural items (including stone tools, waste flakes from the manufacture of stone tools, and milling equipment such as bedrock mortars and pestles and hand stones and portable milling slabs). This artifact inventory indicates that multiple tasks were pursued.

Single-task specific sites were located throughout Washoe and Nisenan territory and were used at variable times of the year as satellite locales aimed at a specific function. Task sites were often located away from camps or villages and near concentrations of plant, animal or fish resources. For example, bedrock mortar stations were positioned in oak groves, fishing stations were established near productive spawning streams, and hunting stations were placed in proximity to deer migration routes. Aboriginal trek routes were patterned after game trails, were later used by the emigrants, and are often the precursors of our modern transportation systems.

Special use sites were often isolated from living areas and comprise petroglyphs (or rock writings), cemeteries, and quarries where toolstone such as chert or basalt was mined and roughly fashioned into tools.

These land use patterns, known from Washoe and Nisenan protohistoric times, are generally consistent with interpretations derived from numerous archaeological investigations within Placer County (and a few excavations on the Foresthill Divide). The archaeological record indicates a shift from sparsely populated hunting-based societies in earlier times to growing populations with increasing reliance on plant foods by the time of historic contact. Also, paleoclimates may have been warmer and drier in the past, allowing for year-round occupation of the higher elevations. Occupation along the Divide may extend earlier than 5000 years ago and continue up to the time of historic contact. Between about 7000 and 5000 years ago, during the Early Archaic Period, climates were warmer and drier and drying lowlands may have prompted human populations to travel to upland resource zones where prehistoric economies incorporated seed processing and fishing, as well as hunting. During the Middle Archaic period, dating from about 5000 to 1300 years ago, climates became moister and, with a return to more optimal living conditions, population densities increased. More intensive prehistoric use of the Foresthill Divide by mixed-mode foragers/collectors began during this period. The Late Archaic period, about 1300 years ago to historic contact, has been equated with the Nisenan and Washoe cultures, as described in ethnographic accounts written by early anthropologists. This period is marked by an overall drying trend, with cool and moist episodes alternating with extended severe drought. Throughout the Late Archaic, prehistoric populations continued to increase.

The largest available body of ethnographic data on the Nisenan and Washoe was collected between the 1890s to the 1930s. Most of this information was gathered after aboriginal populations had been substantially reduced and the process of acculturation was well underway. The Washoe and the Nisenan inhabited the heart of two of the most important mineral resource zones in the western United States, the Sierra Nevada Mother Lode and the Comstock Lode of Nevada, respectively. By the 1850s Euroamericans had permanently occupied their territories and changed traditional lifeways. Mining, lumbering, grazing, commercial fishing, tourism, and the growth of settlements disrupted traditional Indian relationships to the land. As hunting, fishing, and gathering wild foods were no longer possible, they were forced into dependency upon the Euroamerican settlers.

Little is known about the period of initial contact on the Divide between Indians and Euroamericans. Resistance to white incursions occurred, mostly in the form of Indian raids upon the stock and camps in desperate attempts to find food. Disruption of subsistence patterns, starvation, disease, and violence resulted in a severe decline in Native populations and abandonment of villages. The Federal Government's Indian "relocation" policies in California were set in motion during the 1850s with the creation of rancherias and reservations. Nisenan either stayed on reservations or rancherias and married into their own or into other Indian tribes, or became assimilated into the dominant Euroamerican society. Nonetheless, reports of early anthropologists and census records indicate that some Nisenan remained in their home places. Nisenan recall place names for several village locations on the Divide (Littlejohn n.d.; 1928): Pow'oto at Damascus, To Imom at Red Point, Kil'im yan at Westville, Om'lam (meaning "tall rocks") at Mile Hill Toll House, Hem'hem near Yankee Jim's, Wa'tas near Spring Garden, O'pok pok at Todd's Valley, etc. A Nisenan cemetery located in the Spring Garden/Todd's Valley area continues to be used and maintained. Today, significant numbers of Nisenan are dispersed throughout many Sierran foothill communities. On the Foresthill Divide, interest in maintaining traditional ways is reflected in the revival of dances, basketry skills and new construction for a ceremonial roundhouse near Todd's Valley. The Todd's Valley Miwok-Maidu Cultural Foundation has been established within the last five years and the group is in the process of gaining official tribal recognition from the U.S. government (Brown and Suehead, pers. comm., 2000). Members conduct monthly meetings. The group is committed to preserving their heritage and reestablishing their presence and traditional practices on the Divide. Plans are underway to build a roundhouse on BLM land near Foresthill. Miwok-Maidu plant managers are actively involved in harvesting plants of traditional importance and are concerned about the disappearance of oak stands with their prized acorn crop.

The Washoe remain as a recognized tribe by the U.S. government and have maintained an established land base. Its 1,200 tribal members are governed by a tribal council that consists of members of the Carson, Dresslerville, Woodfords, and Reno-Sparks Indian colonies, as well as members from non-reservation areas.

Historic Period

Gold Rush Period (1848-1859)

Earliest exploration during the Spanish and Mexican periods was limited in Placer County. It was not until later, with the growing American interest in the Trans-Mississippi West and California, that the U.S. government dispatched expeditions, such as those led by John C. Fremont, to explore

the region, produce accurate maps, and report back on the region's inhabitants and resources. Fremont's expedition of 1845-1846 traversed portions of Placer County over Donner Pass.

A similar route to that taken by Fremont, ascending the Truckee River out of Nevada, over Donner Pass, and down the west slope into the Central Valley, was opened in 1844 by members of the Stephens-Townsend-Murphy Party, the first emigrant group to cross the Sierra Nevada by wagon. Hundreds of emigrant trains soon followed, the most notable being the Donner Party. The ordeal of starvation and cannibalism, endured by their members in the winter of 1846-1847, is a well-known and tragic episode in the American settlement of the West and is now memorialized at Donner State Historic Park in adjacent Nevada County.

A few months after John Marshall's gold discovery in January of 1848 at Sutter's Mill in Coloma, Claude Chana found gold in Placer County in Auburn Ravine near Ophir. Thousands of gold seekers soon arrived, and within a few years settlements were permanently established in Placer County. The first prospecting along the Foresthill Divide was confined to the shallow placers along gravel bars and the beds of running streams where younger Quaternary stream deposits eroded the gold-bearing gravels laid down in earlier times. These shallow deposits were initially mined by a variety of simple surface hand mining techniques that involved the basic principle of agitating gold-bearing gravel in water-filled containers. Early gold extraction devices include gold pan, rocker, long tom, and sluice box. These early techniques were ultimately phased out in favor of ones that processed higher volumes of gravel. However, the sluice box continued as the standard means for extracting gold from gravels. The shallower pits and excavations and mounds of hand-piled rocks associated with these old surface washings are now largely infilled by erosion and are sometimes difficult to distinguish from natural features.

Older Tertiary Gravels, such as those formed by the ancestral American River that drained the Foresthill Divide, were laid down by slower Sierra Nevada rivers with gradual slopes. These huge deposits of ancient, loosely cemented gold-bearing gravels are more deeply buried and required more sophisticated techniques in their extraction. One method, ground sluicing, employed gravity flows of water aided by pick and shovel to break up deposits. Hydraulic mining was a more powerful form of ground sluicing, using water under pressure to dislodge and direct gold-bearing deposits into sluices where gold was trapped. "Coyoting" and later, more elaborate drift mining techniques, both employed horizontal or vertical excavations sunk into the ground to reach the gold bearing gravels. The majority of mining on the Foresthill Divide was accomplished by drift mining (a type of placer mining), using an adit and/or a shaft to reach the gold-rich ancient river channel lying deep under the ridge.

To accommodate simple mining techniques and to keep pace with the innovations of increasingly more sophisticated and powerful hydraulic methods, which demanded enormous volumes of water, an elaborate system of ditches, flumes and storage reservoirs was put in place. Financial backing requiring larger capital reserves prompted the development of ditch companies that directed their water delivery and storage facilities to major diggings. Ditches and flumes headed in high elevation reservoirs and wound their way down mountainsides.

Placer mines far outnumbered lode mines on the Foresthill Divide. In California, quartz lode mining was a less important mining technique than placer mining until after the discovery and

development of the Comstock silver mines in Nevada in 1859. The “Mother Lode” is the popular name for the main quartz vein that is associated with the intrusion of the Sierra Nevada batholith. This single lode is split into a number of seams that underlie the quartz lode region within western and central Placer County. These gold-quartz veins occur along contacts between granite and metamorphosed sedimentary rocks, volcanics and deeply weathered serpentinite. These and other hardrock sources were tapped by excavating tunnels with drills and dynamite in order to follow gold bearing quartz veins. Rock was transported out of the tunnels on ore carts and then transferred to stamp mills where the rock was crushed to release the gold ores from the surrounding material. The pulverized ore was then treated to remove impurities.

After the discovery of gold along the Foresthill Divide at Birds’ Store in 1850, communities quickly sprang up around the mines. Yankee Jim’s, Todd’s Valley, Michigan Bluff, Foresthill, and the numerous river bars along the North and Middle Forks of the American River were active mining communities during the early 1850s. By 1850, wagons traveled up onto the Divide, following old Indian trails, and pioneered the main travelway that became today’s Foresthill Road (Forest Highway 124). In the early 1850s, Foresthill became the business and transportation center of the Divide and the town survives as the only viable community.

Yankee Jim’s (California Historical Landmark 398) is important as the site of Placer County’s first hydraulic mining operation in 1853 and the site of the first mining ditch in the county (and perhaps the state) cut in 1851. The town takes its name from Yankee Jim (whose real name was reportedly Robinson), an infamous horse thief who built a corral here in 1849 to keep his horses. Yankee Jim is credited with the first gold discovery in the area. A post office was established at Yankee Jim’s in 1852. Yankee Jim’s is also renowned as the site of the first commercial orchards in Placer County. The town became an important local supplier of fruits on the Foresthill Divide. The town declined as a commercial center with the growth of nearby Foresthill and Todd’s Valley on the ridge. By 1882, with the passage of the 1882-Anti-Debris Act that curtailed hydraulic mining, the town’s populace of 3,000 had dwindled to only 150 permanent residents.

Michigan Bluff, another one of the region’s earliest mining towns, was established in 1850 (California Historical Landmark No. 402). By 1853, miners were hydraulicking the area. The mining ditches supplied water for the mines and provided the town with a reliable water supply, and the town soon became a supply center for other mining camps farther up the Divide. Leland Stanford (later to become one of the Central Pacific Railroad’s “Big Four” and subsequently Governor of California) operated a clothing store at Michigan Bluff from 1853 to 1855. The town fell into decline in 1882 when hydraulic mining was restricted.

Foresthill (California Historical Landmark No. 399) was established in the fall of 1850 by M. Fannan, James Fannan and R.S. Johnson as a small trading post. The trading post later became the town’s first “Forest House.” A post office was established here in 1859. Located on the main route along the Divide, Foresthill quickly became a center for trade and traffic to and from Michigan Bluff, Yankee Jim’s, Deadwood, Last Chance, and Westville. Gold was “accidentally” discovered within the deep river gravels below Foresthill after a landslide exposed nuggets of gold in the debris. By 1857, there were 25 drift operations in the area, most tunnels entering into the gravel deposits from the east side of the Divide. Prosperous mining companies around Foresthill included:

the Dardanelles, Jenny Lind, Northwood & Fast, the Rough and Ready, the Jersey, the Alabama, the Eagle, and the India Rubber.

Throughout this early gold rush period, logging, agriculture, and transportation were adjuncts in support of the mining industry. Many migrants who flocked to the county had no intention of working the mines, but rather of working the miners, an equally lucrative prospect with burgeoning populations needing shops and services, food and clothing, transportation and building materials. California was almost completely dependent on imported food, most coming from Oregon, Hawaii, Chile, and other Pacific-rim countries. To fill this subsistence need, disenchanted or opportunistic ex-miners secured the best farming lands in the lower foothills in Placer County to produce food for miners. Ranching of both sheep and cattle was encouraged by the increased demand for meat during the gold rush.

Sawmills immediately sprang up around mining camps to supply lumber for mine timbering and building materials for the growing settlements. The mills at Foresthill and Todd's Valley were in operation in the 1850s.

The growth of gold rush era camps and towns stimulated the development of transportation systems based on supplying mines and camps with needed mail, express and provisions. Mining camps located along the present-day Foresthill Divide were difficult to reach by foot or by wagon. Miners traveled early roads to the mines using crude wagons, pack animals, or backpacks. Freightage with wagons or transport by major express companies out of valley supply centers was not undertaken until larger-scale hydraulic mining developed in the late 1850s. With the permanence of the mining settlements insured, heavy expenditures commonly required for road building were justified. As government was unable or unwilling to finance road building, individuals or companies undertook the task and operated the thoroughfares as toll roads for profit and as a means to attract freight business into a community. As teaming became more important, the number and permanency of roadside inns increased. By the 1850s, the route along the current Forest Highway 124 was established as the main travelway between Auburn and the Foresthill Divide. The original road undoubtedly followed an earlier Native American trail.

A heterogeneous population composed of people from every corner of the world crowded into the Sierra mining districts, as reflected in the ethnic names assigned to some of the earliest camps in and along the Foresthill Divide. Native Americans played an important and little acknowledged part in the earliest period of the gold rush. Immigrants from Hawaii, Latin America, Europe, Asia, and elsewhere were initially welcomed because of their knowledge of mining techniques, but anti-foreign feelings hampered their economic opportunities in Placer County, and many groups were gradually forced out of the mines altogether into other economic pursuits. The mingling of these different ethnic groups and nationalities has produced a unique cultural collage from which the heritage of the Foresthill Divide is drawn.

Post-Gold Rush Period (1859-present)

The years following 1859 are marked by technological changes that prompted a shift in the organization and financial arrangements of the mines. Lode mining and large-scale placer mining within the county required considerable technical skill, which was dependent upon scientific

knowledge and a trained work force. The era of the self-sufficient, itinerant prospector with pick and shovel gave way to a system based increasingly on cooperation between groups of miners, and ultimately to the miner as wage earner employed by large multidivisional corporations tied to the national and world economy. National and foreign capitalists, initially investing only in mining, now poured their money into logging, transportation and water development, enterprises that paralleled mining interests. The period after 1859 can also be characterized by a change in settlement patterns, away from the “boom-bust” camp structure common to the early mining frontier, and the growth of a more mature, stable, and diversified economy and social structure that was not based on mining alone.

The beginning of this period was heralded by a downturn in the county's mining economy, as mining in the American River basins was curtailed by the exodus of miners and capitalists to the Comstock rush of 1859-1865. By the late 1860s, the Placer County mines were again productive. Until 1884, when the hydraulic mines were restrained from dumping their tailings into the streams, the largest hydraulic mines in the world were operated here, providing the county's largest source of gold.

From the turn of the century to 1917, statewide gold production rose. With the restrictions imposed on hydraulic mining, lode mining, drift mining and gold dredging supplied the principal sources of gold. Inflation following World War I caused the continual decline of gold production until the early 1930s, when the prices increased during the depression years; gold output in the state was nearly as high as it had been during the gold rush. Thousands of urban unemployed rushed to the Sierran gold fields to prospect with pan and rocker. The revival of mining infused communities along the Foresthill Divide with new life and stimulated non-mining industries such as logging and agriculture. Many mines were shut down during World War II and reopened soon afterward, but with decreasing productivity. Gradually, outside investment capital was funneled away from mining into California agriculture and real estate. The Placer County gold mining industry has not since recovered. Cement mining operations during the 1920s revived the local economy.

After the discovery of gold and silver in the Comstock in 1859, traffic was sufficiently heavy to warrant major improvements on the trans-Sierra routes. Towns in the western part of the county, in an effort to position themselves at trans-mountain road termini and obtain a share of the rapidly growing Comstock trade, established connecting roads to the major trans-Sierran routes through Placer County. The present route of Highway 124 emerged as the main travelway connecting the Foresthill Divide to Auburn and beyond. By the 1860s, Butcher Ranch became an important stage and wagon stop along this road. The community grew, with a school being established in 1878. Other way stations/ranching communities within this main travelway are the Grizzly Bear House and the 1853 United States Ranch/U.S. House (also called the “Mile Hill Toll House” and “North Star Toll House” and currently near the site of the Monte Verde Inn). These communities ceased to exist as way stations, as the automobile and truck gradually replaced the stagecoach and freight wagon.

Lumbermen commenced cutting pine to meet the needs of the western mines for timbering and flume construction. On the Foresthill Divide, sawmills date back to the early gold rush period. They tended to be smaller, generally produced for local consumption, and usually operated on a seasonal basis. The men who worked in the mill and forest were usually settled members of the community

in nearby towns. Foresthill's timber industry sustained the community after the decline of mining operations. However, the local timber industry was unable to compete with similar operations along the route of the transcontinental railroad. The onset of World War II prompted an increase in lumber production on the Foresthill Divide, as wartime demand stimulated the harvest of remaining large stands along the Divide. After the war, stands on nearby Mosquito Ridge were opened for harvest, with logs being milled in Foresthill.

As with lumber and other county industries, farm production for outside markets came after 1859 and was dependent on the development of better transportation systems. During the 1860s, settled agriculture continued in the western part of the county on farms of varying sizes. Along the Foresthill Divide, agriculture/ranching centered on the ridge tops and on orchard crops and the production of hay and seasonal stocking of cattle.

The late 19th century brought a surge of interest and appreciation of wilderness recreation, and forest lands increasingly became the relocation focus for retirees during the 20th century. The Tahoe National Forest promoted the recreational potential of its lands, which were enhanced by Civilian Conservation Corps crews between 1933 and 1943. Within the last few decades, recreational interest in the region has dramatically increased. This interest is accompanied by a rise in incoming residents who desire to live in an aesthetically pleasing and historically rich area. The enhancement and interpretation of selected historic sites and buildings have boosted community economies throughout Placer County and the Foresthill Divide in the form of recreational tourism.

The Foresthill Divide Historical Society is committed to preserving the history of the Foresthill Divide, which it believes to be a strong point for the community (Moffet, pers. comm., 2000). The unique history of the Divide, along with its recreational potential, are viewed as critical elements in the economic well being of the community and quality of life for its residents. In so doing, there is concern that future developments on the Divide are careful not to alter the historic "flavor" of old townsites. The group wishes to be consulted regarding future development issues on the Divide in order to insure preservation of remaining heritage resources and monitor new development (Percival, pers. comm., 2000). The group has an active membership and conducts regular meetings and has established an Internet web site ([HTTP://mmoffet.newworld.net](http://mmoffet.newworld.net)). Their web site averages from 20 to 40 "hits" a day, with inquiries throughout the U.S. and the world, especially from school districts. Greatest interest lies in topics involving gold mining, the gold rush, mining history, and Miwok-Maidu heritage. The society has a collection of over 800 historic photos, which are variously shown on their web site. The society is committed to sharing information regarding Foresthill Divide's past within the medium of the future, the Internet, and in so doing they provide a model for other local historical organizations to also go on-line.

The "Foresthill Divide Historic Resources Survey" (4/20/1991) was a volunteer project sponsored in part by the Foresthill Divide Historical Society. The group compiled the survey of pre-1945 structures, objects and sites as part of a community awareness program and necessary first step for the economic rejuvenation of the old commercial core of Foresthill, and to assist the County Planning Department in drafting a historic preservation component for the General Plan update. The survey compiles the major historic sites and structures located on publicly owned lands of the Foresthill Divide, with a focus on the historic townsites of Foresthill, Michigan Bluff and Yankee Jim's. Historic properties were evaluated for architectural, historical and/or cultural

significance according to the guidelines set forth in the “California Historic Resources Inventory Survey Workbook.” The Historical Society is prepared to take a position involving the preservation of certain historic structures, and may consider expanding the current historic designations within the Foresthill townsite (Percival, pers. comm., 2000).

Regulatory Framework

Summary of California Laws and Local Ordinances Protecting Heritage Resources

The integrity of the unique and varied heritage resources of Foresthill Divide is being diminished daily by natural deterioration and the processes and the pressures of growth. A variety of California laws and local ordinances have been passed in the last few decades that are designed to protect archaeological resources. Key legislation is summarized below. Several California public resource codes make it illegal to damage objects of historical or archaeological interest on public or private lands or to disturb human remains, including those in archaeological sites. It is illegal to possess remains or artifacts taken from Native American graves, and the Native American Heritage Commission must be consulted whenever Native American graves are found.

California Environmental Quality Act ("CEQA")

CEQA requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources

Health and Safety Code, Section 7052 (Stats. 1939, C.60:672)

This code section establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

Penal Code, Section 622.5 (Stats. 1939, D.90:1605, 5.1)

This code provides misdemeanor penalties for injuring or destroying objects of historical or archaeological interest located on public or private lands. It specifically excludes the landowner.

Public Resources Code, Section 5097.5 (Stats. 1965, C.11362792)

An additional code defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands.

Public Resources Code, Section 5097.9

It is contrary to the free expression and exercise of Native American religion to interfere with or cause severe or irreparable damage to any Native American cemetery, place of worship, religious or ceremonial site or sacred shrine.

Health and Safety Code, Ch. 1492 (SB 297)

The Health and Safety Code requires that the Governor's Native American Heritage Commission be consulted whenever Native American graves are found. It makes it illegal to possess remains or artifacts taken from Native American graves. If human remains are discovered, all work should stop in the immediate vicinity of the find and the county coroner must be notified, according to Section 7050.5 of the Health and Safety Code. If the remains are Native American, the coroner should notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner appropriate disposition of the remains.

Public Resources Code, Sections 5024 and 5024.5

These code sections require State agencies to inventory and protect historical structures and objects under their jurisdiction. The State Historic Preservation Officer must be consulted before any such structure or object is altered or sold.

Confidentiality

In order to prevent vandalism and unauthorized artifact collecting and to protect landowners from trespass, the locations of cultural resources are kept confidential. California Government Code Section 6254.10 exempts archaeological site information from the California Public Records Act, which requires that public records be open to public inspection. Location information is restricted and is not circulated as part of public documents, but is used for planning purposes only.

Data Sources

Research entailed a general literature review of prehistoric and historic sources concerning the Plan area. A windshield survey of portions of the Plan area was conducted. No on-the-ground archaeological field survey was performed.

In order to obtain a sense of the heritage resource for the Plan area, archaeological site records, held at the Archaeological Inventory, North Central Information Center (NCIC), California State University at Sacramento (CSUS) were reviewed. The NCIC maintains records of archaeological sites inventoried in Placer County, including the Foresthill Divide. Records are available to qualified researchers for use during the land development process. Basic heritage resource inventories reviewed at this facility include: the National Register of Historic Places (through current volume); the State of California Historic Landmarks and Points of Historic Interest (through current listings); Historical, Architectural and Archaeological Resources of Placer County (12/1992); Foresthill Divide Historic Resources Survey (4/20/1991); Directory of Properties in the Historic Property Data File for Placer County (1/13/00); Survey of Surveys-A Summary of California Historical and Archaeological Research Surveys (California Department of Parks and Recreation 1989); California Office of Historic Preservation Archaeological Determinations of Eligibility for Placer County (1/28/00); and Caltrans Bridge Survey (10/31/89). Other local histories and secondary sources consulted are listed in the references cited section of Appendix D of the FDCP.

To complete this survey of archaeological site records, contacts with a variety of public and private agencies were also initiated. These included the Tahoe National Forest, U.S. Bureau of Land Management, California Department of Forestry and Fire Protection, Placer County Historical Society/Museums/Archives, Foresthill Divide Historical Society, and Placer County Planning Department. The counsel of representatives of the local Todd's Valley Miwok-Maidu Cultural Foundation and the Washoe Tribe of Nevada and California was sought, in order to determine known areas of Native American cultural ecology and history and management concerns over traditional tribal lands on the Divide. Field record reviews and telephone consultations with agency heritage resource personnel and local contacts for information regarding cultural/historical issues are listed below.

Prior Heritage Resource Investigations

Archaeological investigations on the Foresthill Divide, or in western Placer County in general, are limited. Important archaeological sites have been studied within the Highway 124 corridor and the proposed Auburn Dam Project Area. Other minor excavations have been conducted in the Tahoe National Forest at elevations generally above 3,500 feet. Recorded sites on the Divide indicate a long time sequence of use; however, there have been few excavations to provide details and in-depth information. Work by Ritter (1970) in Spring Garden Ravine for the Auburn Dam Project and by Baker (2000), Baker and Shoup (1992), and Baker et al. (1993) along Highway 124 provide important archaeological references, as they are the only excavations conducted within the Plan area.

While numerous prehistoric sites were recorded during the series of archaeological surveys for the Auburn Dam during the 1960s-1970s, all that remains are bedrock milling features, with more portable prehistoric artifacts being obliterated by gold-mining activities and natural flooding of the river canyon. A review and reorganization of the Cultural Resource Inventory for the Auburn Dam Project was undertaken for the Army Corps of Engineers, Sacramento District, in response to the newly proposed Auburn Dam alternatives requiring reassessment of the database (McCarthy 1989). Previous research efforts by Rackerby (1965), Ritter (1971), and True (1975-1980) disclosed 493 sites, of which 460 are historic and 33 are prehistoric. Findings suggest that the most important site types are ones that represent a cluster of activities and are found at settlements or named locations. Sites have been heavily impacted by flooding and mining activities. The Spring Garden Ravine site (4-Pla-S101, as referenced by Baker 2000) was investigated in 1970 as part of the heritage resource studies for the Auburn Dam. Here, a rich artifact assemblage was radiocarbon dated to approximately 3500 years ago. Middle Archaic populations may have used the site as a base camp for embarking eastward into the higher Sierra, with Late Archaic populations using the site as a seasonal hunting camp.

The California Forest Highway 124 Project, located on the Foresthill Divide between Auburn Ravine and the community of Foresthill, generated a protracted period of archaeological fieldwork conducted intermittently between 1991 and 1997 (Baker and Shoup 1992; Baker et al. 1993). The work included archaeological excavations at two sites, CA-Pla-695/H, the Monte Verde site, and CA-Pla-728/H, the Old Joe site (Baker 2000). The project provided an opportunity for some of the first in-depth archaeological investigations on the Foresthill Divide. CA-Pla-725H is the location

of the 1936 Monte Verde Inn and the former site of the 1875 Mile Hill Toll House (also known as the North Star Toll House and the U.S. Ranch). Site CA-Pla-728/H is the location of a historic marker at the south side of Foresthill Road, commemorating the location of the grave of “Old Joe,” a stage horse killed during a robbery in 1901. Excavations at the Monte Verde site, CA-Pla-695/H, revealed a well-developed midden deposit that contained numerous artifacts. Site use dates from the Early Archaic Period (prior to 3000 B.C.), but the bulk of the evidence suggests that most intensive site use occurred during the Middle Archaic Period, beginning about 2500 B.C. to 2000 B.C. and continuing to sometime between 500 B.C. and 100 B.C. The site was probably a small, permanent or semi-permanent village occupied by 40 to 70 people. Site occupation ended about A.D. 600. Excavations at CA-Pla-728/H disclosed human remains, which were removed with the approval of a Native American observer.

The Tahoe National Forest tested three prehistoric archaeological sites farther up on the Divide and outside the Plan area: the Sailor Flat Site (CA-Pla-500, Wohlgemuth 1984), the Sunflower Timber Sale Site (CA-Pla-664, Waechter 1989), and the Robinson’s Flat site (USFS 05-17-54-176, Smith 1995). These sites are located in close proximity at the 6,200 to 6,500 foot elevation, and appear to be seasonal base camps from which occasional hunting and gathering forays were made into nearby parts of the region during the Middle and Late Archaic periods.

Other excavations of relevance to the Plan area are at Bullards Bar Reservoir (Humphreys 1969), approximately 30 miles north of the Foresthill Divide, which yielded artifacts from the Middle Archaic Period. Large-scale excavations at CA-Nev-407, near Grass Valley, revealed site occupation from at least 1110 B.C. to A.D. 1500 (Clewlow et al. 1984:213).

Archaeological Coverage

No exact information on archaeological coverage is currently available. Coverage strategies, which range from complete to cursory examinations, have not been consistently presented in archaeological reports. Beyond this, archaeological coverage figures are not always reported to the North Central Information Center, unless a report was prepared by a professional archaeologist. The Plan area contains 109 square miles, or approximately 69,760 acres, about half of which are public land. It appears that nearly 100 separate archaeological surveys have been conducted on land within the Plan area. Survey has been accomplished using mixed reconnaissance strategies. The total survey area is approximately 17,067 acres, or about 25 percent of the Plan area. This coverage figure does not include work done as part of the Auburn Dam Project, where coverage area is unclear. Most of the archaeological coverage occurs on the USGS 7.5’ Foresthill Quadrangle.

Number of Surveys	Acreage	USGS Quad
7	25	Auburn
5	800	Colfax
9 + UCD Sugar Pine Reservoir study	1600	Dutch Flat
5	212	Georgetown
8	560	Greenwood
49	7760	Foresthill
11	4590	Michigan Bluff

The USFS has conducted archaeological surveys on approximately 50,000 acres; this comprises about one-third of the land under jurisdiction of the Foresthill Ranger District. Most of this coverage is outside the Plan area.

BLM manages large blocks of land in proximity to the North Fork American River. Here, archaeological coverage has been sparse. While dozens of small inventory surveys have been conducted, few large and comprehensive studies have been completed (Decker, pers. comm., 2000).

Most archaeological work within the Plan area has been accomplished by registered professional foresters (RPF) as part of timber harvest plans (THP). The California Department of Forestry and Fire Protection (CDF) forest practice rules require RPFs to submit archaeological reports within 30 days of a THP approval (D. Foster, pers. comm., 2000). These reports are then reviewed and field inspected by CDF archaeologists, and copies of the final report are filed with the appropriate information centers (e.g., NCIC-CSUS)). Prior to 1991, RPFs may not have fully complied with the rule. Between 1995 and 1999 compliance improved. After May 1999 compliance has been complete, as CDF archaeologists send copies of approved reports directly to the information centers. RPFs are para-professional archaeologists and conduct archaeological surveys during the course of their timber stand evaluations. Consequently, the thoroughness of the ground surface inspection and the quality of reporting are variable, and reports should be evaluated on an individual basis.

Known Heritage Resource Inventory

Heritage Resource Types

The varied environmental zones, geological characteristics, and geographical position of the Foresthill Divide account for a heritage resource base that is exceedingly rich and complex. This explains the wide array of prehistoric and historic site types. Prehistoric site types that have been inventoried include villages, multi-task camps, single task-specific locales, and special use sites.

1. Village sites typically contain: (a) flaked stone tools; (b) portable milling implements such as mortars and pestles and manos and metates; (c) stationary features like bedrock mortars, which are sometimes accompanied by small-diameter pitted boulders (or “cupules”) that appear as miniature mortar cups; (d) discolored soil or “midden” which is usually deep and may contain animal bone, charcoal and organic residues; (e) house pit or dance house depressions; and (d) cemeteries.
2. Multi-task camps are not permanently occupied. They are characterized by: (a) both flaked stone and (b) ground stone tools and (c) sometimes bedrock mortars which may be associated with shallow middens or cupules.
3. Single task-specific locales are places where a single task is performed once or intermittently (seasonally) over successive years. They exhibit either flaked stone or ground stone tools. Isolated bedrock mortars with shallow middens and quarries, where rock sources were quarried and roughly fashioned into tool preforms, also fall into this category.

4. Special use sites involve: (a) petroglyphs (or rock writings); (b) hunting blinds; (c) cemeteries, (d) traditional plant collecting areas, etc.

Historic themes within the Plan area are manifest archaeologically by site types related to mining, water management, logging, transportation, and ranching/agriculture. Those sites containing evidence of habitation structures, but which cannot be directly related to any identifiable historic activity, are classed as settlement site types. These often occur in association with trash dumps and sometimes cemeteries. Historic site types that share multiple activities have been categorized according to their dominant historic theme. For example, a mining site that contains water ditches, dirt roads, remains of a habitation structure, livestock corral, garden, trash dump, and small cemetery is classified solely as a mining site.

Inventory of Heritage Resources

Little of the Plan area has been subjected to systematic survey and many more sites are likely to exist than are summarized here. To best interpret the approximate tally of the numbers and types and statuses of sites recorded within the Plan area to date, certain limitations and problems inherent in the data base need clarification. While the inventory of National Register sites and State Landmark and Points of Historical Interest designations is complete and up to date, data on the total number of sites recorded and their breakdown according to site type represents only a rough estimate of the actual extent of heritage resources inventoried. Total site numbers presented below may be underestimated. No concise database exists for Placer County. The master archaeological site inventory for the County is housed with NCIC-CSUS. Only about half of the total number of archaeological site records have been processed and received official Smithsonian numbers. The many site records that are still assigned temporary site numbers have been recorded by a number of private and public archaeologists with varying philosophies regarding what constitutes a "site." Consequently, some submitted site records may not ultimately qualify for site status. On the other hand, some resources, which should be considered sites, are treated as isolated artifacts or features, and are therefore never assigned a site number. There are a large number of informally reported isolated finds that fall into this latter category. Also, some sites, containing both a prehistoric and historic component, have not been uniformly assigned a single number, as is current practice. Consequently, some have been treated as two separate sites and have been counted twice in the tabulations presented here. Furthermore, for archaeological surveys completed decades ago, sites were not always formally reported. In addition, ground visibility on the Divide is often obscured by brush/slash, natural conditions of the landscape, fire, etc., and these physical changes can greatly hinder the detection of surface artifacts and features. For these and other reasons, the figures presented below should be considered as very rough estimates for planning purposes.

About 85 archaeological sites recorded within the Plan area have been assigned formal state trinomials by the NCIC and/or USFS. This number does not necessarily include sites inventoried on lands under the jurisdiction of the BLM. In addition, sites inventoried as part of THPs have been assigned primary numbers, but most have not been formally entered into the NCIC inventory. Sites with state trinomials and their corresponding USGS quadrangles are listed below:

Number of Sites	USGS Quad
11	Auburn
6	Colfax
10	Dutch Flat
5	Foresthill
2	Georgetown
43	Greenwood
8	Michigan Bluff

These numbers do not include the 493 sites recorded as part of the Auburn Dam project, of which 460 are historic and 33 are prehistoric. Many of these sites are within the Plan area but have not been assigned state trinomial numbers.

On adjoining USFS land, 422 sites have been recorded within the Foresthill Ranger District; most of these sites are located outside the Plan area, with only 14 falling within the Plan area. Approximately one-third of the USFS site total is prehistoric and two-thirds are historic and, within the latter category, 95 percent are associated with mining. Sites recorded on USFS lands within the Plan area and their corresponding USGS quadrangles are listed below:

The following heritage resources located within the Plan area are included in federal, state and/or local listings and inventories. Source numbers 1 through 10 are keyed to heritage property status.

1. National Register of Historic Places,
2. Archaeological Sites Determined Eligible for Inclusion on the National Register of Historic Places-California Office of Historic Preservation,
3. California Historical Landmarks,
4. California Points of Historical Interest,
5. Historic American Buildings Survey/Historic American Engineering Record,
6. Historic Highway Bridges of California-California Department of Transportation,
7. Historic Properties Directory-California Office of Historic Preservation,
8. Historic Sites Listing of the Placer County General Plan Recreation Element,
9. Five Views-California Office of Historic Preservation,
10. National Historic Civil Engineering Landmarks-American Society for Civil Engineers Sacramento Chapter.

Yankee Jim's (3,4,9)
Town of Forest Hill (3,4,9)
Town of Michigan Bluff (3,4,9)
Butcher Ranch (3,4,9)
Grizzly Bear House (3,4,9)
Spring Garden School (3,4)
Todd's Valley (3,4,9)
U.S. Ranch (3,4,9)
Baker Ranch (9)
Bird's Valley

Sunny South (9)

Forks House (9)

National Historic Trail – Michigan Bluff to Last Chance (Western States Trail)

Bridges for historical consideration within or near the Plan area as evaluated by Caltrans (Caltrans Bridge Survey 1989) include:

Bridge No.	Features Intersected	Facility Carried	Historical Significance
19C0001	North Fork American River	Old Auburn Foresthill Rd	no
19C0002	North Fork American River	Yankee Jim's Rd	yes
19C0100	Shirtail Creek	Shirtail Cny Cr Rd	no
19C0175	Sugar Pine Dam Spillway	Iowa Hill Rd	no
19C0176	North Fork American River	Iowa Hill Rd	no

California Historical Landmarks (CHL) with the Plan area include:

Yankee Jim's Townsite CHL No. 398

Foresthill Townsite CHL No. 399

Michigan Bluff Townsite CHL No. 402

The Directory of Properties in the Historic Property Data File for Placer County within the Plan area (Office of Historic Preservation 1/13/00) lists the following properties for consideration of eligibility to the National Register. Most of the properties have not been formally evaluated.

Address	Name	City	Date	*Status
Auburn Foresthill	Luster House	Foresthill	-	7
6120 Church St	Finning House	Foresthill	1860	7
Foresthill Rd	Town of Forest Hill	Foresthill	1850	7J
24469 Foresthill Rd		Foresthill	1880	7J/6Y2
24707 Foresthill Rd		Foresthill	1936	7J/6Y2
24825 Foresthill Rd		Foresthill	1900	7J
24442 Lowe St		Foresthill	1935	7J
24160 Main St		Foresthill	-	7J
24260 Main St	Red & White Store	Foresthill	1910	7J
24406 Main St	Schuyler House	Foresthill	1863	7J
24490 Main St		Foresthill	1910	7J
24500 Main St		Foresthill	1930	7J
24560 Main St	Foresthill Grocery	Foresthill	1860	7
24580 Main St	Foresthill Community Center	Foresthill	1910	7J
24590 Main St	Forest Hill Lodge	Foresthill	1947	7J
24640 Main St		Foresthill	1940	7J
24650 Main St		Foresthill	1890	7J
24680 Main St		Foresthill	1860	7J
24690 Main St		Foresthill	1890	7J

24708 Main St		Foresthill	-	7J
24750 Main St	Albrecht Store	Foresthill	1860	7J
SR49	Old Forest Hill Ranger Station	Foresthill	1934	6Y2
Yankee Jim's Rd	Yankee Jim's Rd	Foresthill	1867	7J/7L
5865 Church St		**Foresthill	-	7J
6040 Church St		**Foresthill	1930	7J
6055 Church St		**Foresthill	1901	7J
6070 Church St		**Foresthill	1930	7J
6121 Church St		**Foresthill	1900	7J
23801 Foresthill Rd		**Foresthill	1900	7J
24225 Foresthill Rd		**Foresthill	1880	7J
24245 Foresthill Rd		**Foresthill	1870	7J
24271 Foresthill Rd		**Foresthill	1870	7J
24281 Foresthill Rd		**Foresthill	1870	7J
24345 Foresthill Rd		**Foresthill	1930	7J
24407 Foresthill Rd		**Foresthill	1860	7J
24495 Foresthill Rd		**Foresthill	1920	7J
24515 Foresthill Rd		**Foresthill	1880	7J
24625 Foresthill Rd		**Foresthill	1900	7J
24645 Foresthill Rd		**Foresthill	1900	7J
24655 Foresthill Rd		**Foresthill	1900	7J
24675 Foresthill Rd		**Foresthill	1900	7J
24741 Foresthill Rd		**Foresthill	1900	7J
24781 Foresthill Rd		**Foresthill	1900	7J
24791 Foresthill Rd		**Foresthill	1900	7J
6060 Gold St		**Foresthill	1870	7J
24390 Lowe St		**Foresthill	1860	7J
24522 Lowe St		**Foresthill	1900	7J
24523 Lowe St		**Foresthill	1930	7J
8200 Michigan Bluff Rd	Michigan Bluff	**Foresthill	1850	7L
24370 Race Track St		**Foresthill	1950	7J
Yankee Jim's Rd	Suspension Bridge	**Foresthill	1930	7J
5765 Yankee Jim's Rd		**Foresthill	1880	7J
5781 Yankee Jim's Rd		**Foresthill	1920	7J
5840 Yankee Jim's Rd	Ford House	**Foresthill	1890	7J
5850 Yankee Jim's Rd		**Foresthill	1860	7J

* 6Y = determined ineligible for listing in the National Register through a consensus determination of a federal agency and the State Historic Preservation Officer; 7 = not evaluated; some properties on the above list also appear in the inventory presented in the "Historical, Architectural, and Archaeological Resources of Placer County, Volume 3" December 1992]

* 7J,7L = Unevaluated properties.

** = vicinity of Foresthill

Expected Heritage Resource Sensitivity

Some idea of expected heritage resource sensitivity can serve as a general guide to advanced planning by providing a means of estimating the probable likelihood of sites occurring within a given area proposed for development. Sensitivity ratings indicate the degree of probability of finding sites in a specific project area and the relative number and types of sites expected. In this way, project sponsors can anticipate, at the outset, the extent to which heritage resources may become an issue for consideration later on.

Heritage resource sensitivity predictions for the Plan area are derived from the collective results of many archaeological surveys in similar environments throughout the region and incorporate the obvious correlation between archaeological site locations and basic environmental variables (water, level ground, etc.). In a study undertaken by the Tahoe National Forest, significant correlation was found for the major types of sites and basic environmental variables (Markley and Henton 1985). Lindström (1991) also incorporated these variables into her archaeological sensitivity model for the Nevada County General Plan Update. An assessment of archaeological sensitivity for the Plan area draws directly from these two examples.

A checklist of environmental variables influencing heritage resource sensitivity assessment is presented below. Correlation with specific environmental variables is better for prehistoric site types than for historic sites. Historic activities, particularly mining, involved intensive use of specific locations with little reliance or dependence on local resources for subsistence or other economic needs.

I. Environmental Variables

A. Topography

1. Elevation (600 to 4800 feet)
2. Percent slope (0-30%; 30-50%; 50+%)
3. Aspect (north; south; east; west)
4. Proximity to water (less than 1/4 mile; greater than 1/4 mile)
5. Water Type
 - a. Stream (intermittent, permanent)
 - b. Spring
6. Soils (agriculture/timber productive)/Geology (mineral deposits; quarry sources)

B. Flora (oak-grassland; hardwood/conifer; conifer; meadow; community ecotone)

C. Fauna

1. Deer Range
2. Fishery

II. Other Considerations

- A. Ethnographic/historic data that document past land use
- B. Previously recorded sites
- C. Recent/historic land modifications and disturbance

Native American Prehistory and History

For both the Nisenan and Washoe, territories encompassed wide-ranging elevations and varied environmental zones. Intense gathering was most effectively carried out in the grassland and oak woodland zone below 3,000 feet, where winter villages were located. Single task-specific locales, from which a multitude of plant and animal resources were procured, are found in higher numbers in proximity to winter villages. Cemeteries are generally restricted to the winter village area. Elevations above 3,000 feet on the west slope are beyond the range of permanent occupation but are moderately to highly sensitive to contain seasonal multi-task camps, single task-specific locales, petroglyphs and hunting blinds. Level ground is a basic determinant for any prehistoric habitation. Areas with greater than 30 percent slope may accommodate some specific short-term tasks and hunting blinds. Petroglyphs generally occur on large horizontal bedrock outcrops.

Southern and eastern exposure was generally advantageous for warmth and protection from storms.

Villages are dependent upon a permanent water source. Seasonal multi-task camps occur around springs and along intermittent streams during their periods of flow. Camps along streams are most likely to occur at the confluence of a major creek flowing down from the ridge, thereby providing an access corridor up to the ridge.

Geological variables are centered upon rock sources used in fashioning stone tools; namely, metasediments that contain chert outcrops and volcanic flows which are comprised of basalt. Granite was favored for milling equipment. Horizontal smooth surfaces of granite or metasediments were preferred for petroglyphs.

The floral component is important in the prediction of prehistoric site locations, in that plant resources made up a significant percentage of the subsistence base of the aboriginal inhabitants of the county. Elevation and microenvironmental diversity enhanced the rich and varied seasonal resources that were regularly available for human use. However, past plant and animal communities were different both in make-up and distribution than those found today. Changes are due to historic impacts associated with mining, logging and grazing, to the introduction of non-native plant species, and to the cessation of regular aboriginal burning, which was practiced to improve the vigor of plant resources. The pine forests, particularly in the purely coniferous areas, were not as productive for aboriginal exploitation as were areas containing hardwoods (especially oaks) and a wide variety of brush and grass species. Ecotones, where plants were procured from the junctions of two or more vegetation communities, were the most productive and efficient zones. Areas corresponding to more diversified plant species are designated as highly sensitive.

Animal resources, including large and small mammals, a variety of avifauna, large anadromous fish (salmon and steelhead trout), and smaller suckers and minnows, were significant food items. Deer herds are migratory, wintering in the major river canyons and moving upslope in elevation in the spring (a pattern not unlike that practiced by the Nisenan and Washoe). Zones that accommodate deer migration routes and winter ranges or support productive fisheries are highly sensitive.

Disturbed areas are less likely to contain sites that are intact and may be less sensitive. Areas containing known heritage resources for which there is some type of formal record are, of course,

extremely sensitive. Heritage resource sensitivity goes beyond the archaeological record. Both the Maidu/Miwok and the Washoe have expressed a concerted interest in maintaining access to traditional lands upon which important medicinal and food plants continue to thrive.

A checklist of variables influencing prehistoric resource sensitivity is presented below. Prehistoric site types are abbreviated: V=village; MT=multi-task site; ST=single task-specific site; SU=special use; C=cemetery; HB=hunting blind; and P=petroglyph.

Variable	Predicted Site Type	Sensitivity Level
Elevation:		
600-3000	V/MT/ST/SU-C	high
3000-4800	MT/ST/SU-P,HB	moderate
Percent slope:		
0-30%	V/MT/ST/SU-C,P	high
30-50%	ST/SU-HB	moderate
50%+	ST/SU-HB	high-low
Aspect:		
Southern	V/MT/ST	high
Eastern	V/MT/ST	high
Western	V/MT/ST	moderate
Northern	MT/ST	high-low
Proximity to water:		
less than 1/4 mile	V/MT/ST	high
greater than 1/4 mile	ST	high-low
Water type:		
Stream – permanent	V/MT/ST	high
Stream – intermittent	MT/ST	moderate
Spring	V/MT/ST	high
Geology:		
Chert/metasediment outcrops	ST	high
Large, flat granite/ metasedimentary surface	SU-P	high
Flora:		
Oak grassland	V/MT/ST/SU-C	high
Hardwood/conifer	MT/ST	high
Conifer	ST	mod-low
Meadow	V/MT/ST	high
Ecotone	V/MT/ST	high

Fauna:

Deer range	V/MT/ST/SU-HB, P	high-mod
Fishery	V/MT/ST	high-mod

Other:

Ethnographic/historic documented land use	V/MT/ST/SU-C, HB, P	high
Previously recorded sites	V/MT/ST/SU-C, HB, P	high
Recent land modifications		
Undisturbed	V/MT/ST/SU-C, HB, P	high
Disturbed	V/MT/ST/SU-C, HB, P	mod-low

Euroamerican History

Historic site locations are much less dependent upon environmental variables and correlation is less direct. Prehistoric and historic sites tend to be distributed differently, at least with regards to elevation. Lower elevations have a consistently higher than average density of historic sites, with mining sites generally located below 5,000 feet.

Geological data are key to predicting historic mining sites. All areas which fall within zones containing: (1) deposits formed by hydrothermal processes, e.g. gold, silver, copper, zinc; (2) placer gold deposits; (3) industrial mineral deposits, e.g. barite, clay, and silica; (4) sand and gravel resources of alluvial and glacial origin; and (5) crushed stone resources consisting of metamorphic and volcanic rocks are highly sensitive. Other important independent variables include steep slopes and the presence of water. The positive correlation with water is to be expected, since many of the placer deposits are located near streams and rivers. The correlation with steeper slopes is also not surprising, as many of the mining sites are either located in the bottom of steep drainages or on canyon sides where rivers have cut through the gold-bearing deposits. Water management activities are initially tied to water, with sources generally at higher elevations. The correlations between ditches and flumes and environmental variables ends there, however, except for a preference for slopes with southern exposure.

Transportation routes are relatively free of environmental constraints. While more moderate terrain was favored, steep slopes were still traversed. The main road along the ridge of the Divide, along with intersecting road systems, is considered to be the major sensitive transportation corridor within the Plan area.

Logging is tied to a forest vegetation type and the productivity of soils. More moderate slopes, sunny exposures and the presence of water are important considerations in historic logging camp locations.

Ranching/grazing activities are tied to elevation and soil productivity. The main constraints on historic agricultural activities were elevations below the frost zone and relatively level terrain. Although the Foresthill Divide is not considered a major agricultural area, ranches along the ridge supported localized crops of fruits, and vegetables and hay. Ranching activities required water and sufficient feed for livestock and somewhat level terrain. Associated archaeological sites most

closely conform to the combination of environmental variables requisite for prehistoric sites (level spots near water, etc.). Historic settlement is less dependent upon environmental variables than is prehistoric settlement. The need for level ground for habitation was overcome by artificial terracing. Water was brought in by ditch or flume and foodstuffs and supplies were transported to the living site.

Disturbed areas are less likely to contain sites that are intact and may be less sensitive. Areas containing known heritage resources for which there is some type of formal record are, of course, extremely sensitive.

A checklist of variables influencing historic resource sensitivity follows. Historic site types and their abbreviations include: M=mining; S-D=settlement site with dump; W=water management; L=logging; T=transportation; C=cemetery, R-A=ranching and agriculture; and G=grazing.

Variable	Predicted Site Type	Sensitivity Level
Elevation:		
600-4800	M/S-D/W/T/C	high
600-3000	M/S-D/W/T/C/R-A	high
3000-4800	M/S-D/W/L/T/C/G	high
Percent slope:		
0-30%	M/S-D/W/L/T/C/R-A/G	high
30-50%	M/W/L/T	high
50%+	M	high
50%+	W/L/T	moderate
Aspect:		
Southern	S-D/W	high
Proximity to water:		
less than 1/4 mile	M/S-D/W/L/R-A/G	high
greater than 1/4 mile	M/S-D/R-A/G	mod-low
Water type:		
Stream – permanent	M/S-D/W/R-A/G	high
Stream – intermittent	M/S-D/W/R-A/G	mod
Spring	S-D/R-A/G	high
Geology/soils:		
Mineral bearing deposits	M/S-D/W	high
Productive soils	L/S-D/R-A/G	high
Flora/Fauna:		
Oak-grassland	S-D/W/R-A/G	high
Hardwood/conifer	L	moderate

Conifer	L	high
Meadow	R-A/G	high
Other:		
Historic documentation of land use	M/S-D/W/L/T/C/R-A/G	high
Previously recorded sites	M/S-D/W/L/T/C/R-A/G	high
Recent land modifications		
Undisturbed	M/S-D/W/L/T/C/R-A/G	high
Disturbed	M/S-D/W/L/T/C/R-A/G	mod-low

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to cultural resources:

Goal 4.B.1. Identify, protect, record and enhance the Divide’s important historical, archaeological, and cultural sites and their contributing environment.

Policies

- 4.B.1-1 Assist the residents of Foresthill in becoming active guardians of their community's cultural resources.
- 4.B.1-2 The County and the community shall preserve the historical character of the Core Area of Foresthill.
- 4.B.1-3 Encourage all agencies and groups (USFS, Placer County, Historical Society) to preserve, record and mark sites and artifacts of local importance (such as Startown, Damascus, Sunny South, Red Star, Miller’s Defeat).
- 4.B.1-4 Solicit the cooperation of the owners of cultural resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.
- 4.B.1-5 Solicit the views of the Native American Heritage Commission and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- 4.B.1-6 Use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.
- 4.B.1-7 Require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a countywide cultural resource data base, to be maintained by the Department of Museums.
- 4.B.1-8 Existing large trees or groves of historic and/or cultural significance (i.e., weather tree in Michigan Bluff, cork oaks on Todd Valley Road, Finning Tree off Finning Mill Road, Fork’s House Grove, Harold T. “Bizz” Johnson Tree) should be identified and protected to the best of the County’s ability. Trees so identified should only be removed as a last resort.
- 4.B.1-9 Areas of potential archaeological sensitivity shall be identified and catalogued by Placer County. Proposed development or public works projects within this area shall be required to undertake an archaeological survey prior to project approval. Proposed projects outside this area, in locations

that have not been significantly disturbed, shall be referred to the California Archaeological Inventory, Northern Information Center, California State University, Sacramento for review and comment, and shall be required to undertake an archaeological survey prior to project approval upon recommendation by the Center.

- 4.B.1-10 The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- 4.B.1-11 The County shall use the State *Historic Building Code* to encourage the preservation of historic structures.
- 4.B.1-12 The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.
- 4.B.1-13 The County shall consider acquisition programs as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, The Nature Conservancy and the Placer Land Trust.
- 4.B.1-14 The County shall require that the subdivision of property containing existing features of cultural or aesthetic merit be carefully designed to preserve these structures and, where appropriate, utilize them as a focal point of neighborhood design.
- 4.B.1-15 The County shall make the protection of significant cultural resources a priority over recordation and/or destruction.
- Goal 4.B.2. Encourage the continued provision of a wide variety of cultural activities that contribute to the appeal of the Foresthill area.**

Policies

- 4.B.2-1 The County shall encourage the development of multipurpose facilities which can function as recreational sites, open space areas and for historic, cultural, and archaeological preservation.
- 4.B.2-2 The use of the Foresthill Museum as a repository of historical artifacts on the Divide shall be encouraged.

3.7.3 IMPACT EVALUATION CRITERIA

Under the California Environmental Quality Act (CEQA), historical resources are recognized as a part of the environment (Public Resources Code 21001(b), 21083.2, 21084(e), 21084.1). A “historical resource” includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant, or important in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California (Public Resources Code 5021.1).

In 1992, the Public Resources Code was amended as it affects historical resources. The amendments included creation of the California Register of Historical Resources (Public Resources Code 5020.4, 5024.1 and 5024.6). While the amendments became effective in 1993, it

was not until January 1, 1998, that the implementing regulations for the California Register were officially adopted (Public Resources Code 4850 *et seq.*).

The California Register is an authoritative listing and guide for state and local agencies and private groups and citizens in identifying historical resources. This listing and guide indicates which resources should be protected from substantial adverse change. The California Register includes historical resources that are listed automatically by virtue of their appearance on or eligibility for certain other lists of important resources. The Register includes historical resources that have been nominated by application and listed after public hearing. Also included are historical resources listed as a result of an evaluation by specific criteria and procedures adopted by the State Historical Resource Commission.

The criteria used for determining the eligibility of a cultural resource for the California Register are similar to those developed by the National Park Service for the National Register of Historic Places. However, criteria of eligibility for the California Register were reworded to better reflect California history.

Any building, site, structure, object or historic district meeting one or more of the following criteria may be eligible for listing in the California Register:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Eligibility for the California Register also depends on the integrity, or the survival of characteristics of the resource that existed during its period of significance. Eligible historic resources must not only meet one of the above criteria, but also they must retain enough of their historic character or appearance to convey the reasons for their importance, or retain the potential to yield significant scientific or historical information or specific data.

Like the process of evaluating historical resources for National Register eligibility, California Register evaluations include the consideration of seven aspects of integrity: location, design, setting, materials, workmanship, feeling and association. The evaluation of integrity must be judged with reference to the particular criterion or criteria under which a resource may be eligible for the California Register. However, the implementing regulations specifically caution that alterations of a historic resource over time may themselves have historical, cultural or architectural significance.

Most often, historical resources eligible for the California Register will be 50 years old or older. However, the new implementing regulations stipulate that "a resource less than fifty (50) years old may be considered for listing in the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance."

If an archaeological resource does not meet the definition of a "historical resource," it may meet the definition of a "unique archaeological resource" under Public Resources Code Section 21083.2. An archaeological resource is "unique" if it:

1. Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
2. Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
3. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
4. Is at least 100 years old and possesses substantial stratigraphic integrity;
5. Involves important research questions that historical research has shown can be answered only with archaeological methods.

Public Resources Code Section 21098.1 stipulates that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. "Substantial adverse change" means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired.

Any project that involves federal undertakings, lands, funds, or permits must comply with Section 106 of the National Historic Preservation Act (NHPA; amended 1999); this Act defines important ("significant") resources as those listed on, or eligible for listing on, the National Register of Historic Places. Section 106 and its implementing regulations require federal agencies to provide the Advisory Council on Historic Preservation an opportunity to comment on actions that will affect historic properties. National Register criteria define an important cultural resource as one that is associated with important persons or events, or that embodies high artistic or architectural values, or that has scientific value (36 CFR 60.6). Where a cultural resource has not been evaluated for its importance, it is treated as potentially important until an evaluation can be done.

According to CEQA Guidelines Sections 15064.5 and 15126, a project is considered to have significant impacts if it will disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group or a paleontological site. Based on this guideline, the proposed FDCP was considered to have a significant impact if it resulted in:

- Damage or destruction of any significant prehistoric or historic properties;

- Neglect of a property resulting in its deterioration or destruction; or
- Damage or destruction of any unrecorded archaeological sites or features.

3.7.4 IMPACTS AND MITIGATION MEASURES

3.7-1 Direct impacts on prehistoric and historic sites within the Plan area due to ground-disturbing activities associated with development in accordance with the FDCP.

No specific, direct impacts have been identified that are associated with adoption of the FDCP. However, future ground-disturbing activities on individual project sites may disturb or destroy cultural resources. The proposed FDCP includes goals and policies that address preservation of historical, archaeological, and cultural sites and their contributing environment.

The FDCP Heritage Resource Element prepared by Susan Lindstrom, Ph.D., Consulting Archaeologist, concludes that no specific mitigation measures are necessary at this time. It further states:

All locales within the FDCP area destined for future development should be subject to a detailed heritage resource analysis at the project specific stage. Such study should involve the required record search at NCIC, archival research, an archaeological field reconnaissance, pertinent architectural evaluations, and consultations with appropriate federal, state and local agencies and representatives of the Native American community. If resources exist, the criteria for significance should be applied and, if necessary, appropriate mitigation measures developed. Mitigation measures may involve additional archaeological investigations and include incorporation of the heritage resource into the project plan as interpretive features. In particular, the archaeological remains left by ancestral Native Americans require respectful treatment, along with the continued incorporation of contemporary Native American opinions, knowledge and sentiments into the planning process. Placer County should maintain the confidentiality of heritage site locations and provide heritage resource management guidance to development interests, so that developers can be informed of the sensitivity of the plan area and be prepared to budget for heritage resource studies at the earliest stages of project-specific planning.

The recommendations of the consulting archaeologist have been incorporated in the goals, policies and implementation measures of the proposed FDCP. This impact is therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.7-2 Indirect impact on prehistoric and historic sites in the Plan area due to increased public access into an area containing a site, which could result in vandalism.

Indirect impacts that could occur if development introduces incompatible visual or audible elements into the setting of a potentially significant resource.

The FDCP Heritage Resource Element notes that the latter impact (introduction of incompatible visual or audible elements) is especially critical in the case of historic structures. As noted under Impact 3.7-1 above, the proposed FDCP includes Policy 4.B.1-10 requiring the County to maintain confidentiality regarding the locations of archaeological sites to protect and preserve these resources from vandalism and the unauthorized removal of artifacts. Any new trails developed pursuant to adoption of the FDCP will be subject to the Plan policy (4.B.1-9) that requires public works projects to protect areas of archaeological sensitivity. The proposed FDCP also includes policies to preserve the historical character of Foresthill; to preserve and enhance cultural resources; and to require that discretionary development projects identify important historical, archaeological and cultural sites and protect them from damage, destruction and abuse. Because the potential indirect impacts are addressed in the FDCP, these impacts are therefore considered *less than significant*.

Mitigation Measure

No mitigation measures are required.

3.8 AIR QUALITY

3.8.1 INTRODUCTION

Ambient air quality is generally determined by climatological conditions, the topography of the air basin, and the type and amount of pollutants emitted. The FDCP area is subject to a combination of topographical and climatic factors, which result in the potential for regional and local pollutant accumulation. The following discussion describes relevant characteristics of the air basin, and provides an overview of physical conditions affecting pollutant accumulation and dispersion in the Plan area. The Air Quality Setting also describes the sources, types, and health effects of major air pollutants.

The air quality analysis was prepared by Donald Ballanti, Certified Consulting Meteorologist, and Joseph O'Bannon.

3.8.2 SETTING

PURPOSE

Air quality is an important resource in the Foresthill Divide Community Plan area. Clean, fresh air is one of the features that attracts people to live in rural areas such as the Foresthill Divide. The Plan area is less subject to severe inversion conditions in the winter months than other Placer County communities. The ridgetop location of most development avoids the effects of strong inversions in winter that affect communities located in valleys. The Plan area is adversely affected by the transport of ozone into the local air basin from areas to the west into an area that would otherwise be fairly pristine. The purpose of the Air Quality section is to underscore the

importance of air quality to Plan area residents, and to assure that all feasible actions are taken in the Plan area to maintain and improve air quality. Improving air quality in other regions is outside the jurisdiction of Placer County.

DISCUSSION

Climate/Air Quality

This section examines the climatic influences that affect air quality of the Foresthill Divide Community Plan area and describes available data on measured contaminant levels near the Plan area. It outlines the regulatory and planning agencies and programs that must be reflected in the Foresthill Divide Community Plan.

Climate and Meteorology

The Foresthill Divide Community Plan area is located within the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The Placer County APCD is subdivided into three different air basins: the Lake Tahoe Air Basin, the Mountain Counties Air Basin, and the Sacramento Valley Air Basin. The Plan area is located at the west end of the Mountain Counties Air Basin portion of the county, and is very close to the boundary with the Sacramento Valley Air Basin.

Climatic factors that affect air quality near the Plan area are wind and atmospheric stability. The daytime wind direction is generally westerly, which is the result of up-river breezes typical in mountainous terrain. During the nighttime, down-river “drainage” flows are frequent, particularly in winter. These nighttime winds are generally light, and follow the watercourse in a downstream direction.

Atmospheric stability is a measure of the atmosphere’s ability to vertically dilute pollutants. When the atmosphere is very stable (i.e., inversion conditions), pollutants may accumulate within a shallow layer near the ground, with resulting poor air quality. In the Plan area, these conditions are most likely to occur in winter.

Potential air quality problems near the Plan area are directly related to climatic factors. During the summer months, the general wind circulation has the potential to transport ozone from the adjacent Sacramento Valley Air Basin into the Plan area, and Particulate Matter 10 microns or less in diameter (PM10) concentrations can be elevated by local burning, controlled burns and forest fires. During the winter months, more localized problems can arise when PM10 emissions from wood burning have the potential to accumulate under inversion conditions.

Existing Air Quality

Criteria Air Pollutants

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These

ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. Table 3.8-1 identifies the major criteria pollutants, characteristics, health effects and typical sources.

Table 3.8-1
Major Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen.) Often called photochemical smog.	<ul style="list-style-type: none"> • Eye Irritation • Respiratory function impairment 	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> • Impairment of oxygen transport in the bloodstream. • Aggravation of cardiovascular disease. • Fatigue, headache, confusion, dizziness. • Can be fatal in the case of very high concentrations 	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	<ul style="list-style-type: none"> • Increased risk of acute and chronic respiratory disease. 	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	<ul style="list-style-type: none"> • Aggravation of chronic obstruction lung disease. • Increased risk of acute and chronic respiratory disease. 	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM ₁₀	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	<ul style="list-style-type: none"> • Aggravation of chronic disease and heart/lung disease symptoms. 	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

Source: Donald Ballanti, Certified Consulting Meteorologist, 2000.

The federal and California state ambient air quality standards are summarized in Table 3.8-2 for important pollutants. The federal and state ambient standards were developed independently with different purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM₁₀.

Table 3.8-2
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	0.12 PPM	0.09 PPM
	8-Hour	0.08 PPM	--
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual	0.05 PPM	--
	1-Hour	--	0.25 PPM
Sulfur Dioxide	Annual	0.03 PPM	--
	24-Hour	0.14 PPM	0.05 PPM
	1-Hour	--	0.5 PPM
PM ₁₀	Annual	50 Fg/m ³	30 Fg/m ³
	24-Hour	150Fg/m ³	50 Fg/m ³
PM _{2.5}	Annual	15 Fg/m ³	--
	24-Hour	65 Fg/m ³	--
Lead	30-Day Avg.	--	1.5 Fg/m ³
	Month Avg.	1.5 Fg/m ³	--

PPM = Parts per Million

Fg/m³ = Micrograms per Cubic Meter

Source: Donald Ballanti, Certified Consulting Meteorologist, 2000.

The USEPA in 1997 adopted new national air quality standards for ground-level ozone and for fine Particulate Matter. The existing 1-hour ozone standards of 0.12 parts per million (PPM) will be phased out and replaced by an 8-hour standard of 0.08 PPM. New national standards for fine Particulate Matter (diameter 2.5 microns or less) have also been established for 24-hour and annual averaging periods. The current PM₁₀ standards were retained, but the method and form for determining compliance with the standards were revised.

Implementation of the new ozone and Particulate Matter standards was further complicated by litigation (*American Trucking Association, Inc., et al.v. United States Environmental Protection Agency*; No. 97-1440 and 97-1441). On May 14, 1999 the Court of Appeal for the District of Columbia Circuit issued a decision ruling that the Clean Air Act, as applied in setting the new public health standards for ozone and particulate matter, was unconstitutional as an improper delegation of legislative authority to the USEPA. The decision was appealed to the U.S. Supreme Court, which when deciding the case in February 2001 made no rulings regarding the PM_{2.5} standards, so that rulings made in the Court of Appeal stand. The Court of Appeal remanded the case to EPA for further consideration of all standards at issue.

Ambient Air Quality

The Placer County APCD operates air quality monitoring sites in nearby Colfax and Auburn measuring ozone and PM₁₀. Data from these monitoring sites is summarized in Table 3.8-3. Table 3.8-3 shows that the state and federal ozone standards are not met in the vicinity of the Plan area, primarily due to transport of ozone into the area from the greater Sacramento area. PM₁₀ air quality meets federal standards, but the Plan area (like most of California) does not meet the state standard for PM₁₀.

Table 3.8-3
Summary of Air Quality Data for Colfax and Auburn, 1995-1997

Pollutant	Standard	Year	Days Exceeding Standard in Colfax	Days Exceeding Standard in Auburn
Ozone	1-Hour State	1997	2	4
		1996	4	22
		1995	16	26
Ozone	1- Hour Federal	1997	0	0
		1996	0	1
		1995	1	2
Ozone	8-Hour Federal	1997	2	1
		1996	5	17
		1995	11	18
PM ₁₀	24-Hour State	1997	10	2
		1996	2	4
		1995	0	0
PM ₁₀	24-Hour Federal	1997	0	0
		1996	0	0
		1995	0	0

Source: Nishikawa, Todd, Acting Air Pollution Control Officer, Placer County APCD, 2000.

Existing Emission Sources

The Plan area contains few industrial sources of pollution. Major emission sources in the Plan area are motor vehicles, open burning, and residential wood burning. Unpaved roads, lumbering operations and construction activities contribute to the level of PM₁₀.

Regulatory Framework for Air Quality

Local APCD Jurisdiction

The Placer County APCD is responsible for regulation and permitting of stationary sources and some area sources of pollution. The District monitors air quality and is responsible for preparation of regional air quality plans.

Regional Air Quality Planning

Both the federal and state governments have enacted laws mandating the identification of areas not meeting the ambient air quality standards and development of regional air quality plans to eventually attain the standards. Under the federal Clean Air Act, Placer County is considered “unclassified” or “attainment” for all pollutants except ozone. For the state standards, Placer County is “non-attainment” for PM₁₀ and ozone, and either “attainment” or “unclassified” for other pollutants. The designation with respect to ozone stipulates that the Mountain Counties Air Basin portion of Placer County is affected by ozone transported from upwind air basin.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to air quality:

Goal 4.C.1. Accurately determine and fairly mitigate the local and regional air quality impacts of projects proposed in the county.

Policies

4.C.1-1 The County shall determine project air quality impacts using analysis methods and significance thresholds recommended by the PCAPCD.

Note: The District is preparing guidelines that will provide standard criteria for determining significant environmental effects, that will provide a uniform method of calculating project emissions, and that will provide standard mitigation measures to reduce air quality impacts. The District now has interim thresholds of significance (10 tons ROG or NO_x per year) and recommends analysis methods on a project by project basis.

Projects analyzed in sufficient detail to determine air quality impacts in an EIR or negative declaration could be exempt from further analysis during subsequent discretionary approvals such as zone changes or subdivision maps. For projects where insufficient details were known at the time the EIR was prepared, the analysis should be focused on specific impacts not previously addressed.

4.C.1-2 The County shall ensure that air quality impacts identified during CEQA review are consistently and fairly mitigated.

4.C.1-3 The County shall ensure all air quality mitigation measures are feasible, implementable and cost effective.

4.C.1-4 The County shall reduce the air quality impacts of development projects that may be insignificant by themselves, but cumulatively are significant.

4.C.1-5 The County shall encourage innovative measures to reduce air quality impacts.

Goal 4.C.2. Educate the public on the impact of individual transportation, lifestyle, and land use decisions on air quality.

Policies

4.C.2-1 The County shall work to improve the public's understanding of the land use, transportation, and air quality link.

4.C.2-2 The County shall encourage local public and private groups that provide air quality education programs.

Goal 4.C.3. Ensure that new development provides the facilities and programs that improve the effectiveness of transportation control measures and congestion management programs.

Policies

4.C.3-1 The County shall work with employers and developers to provide employees and residents with attractive, affordable transportation alternatives.

4.C.3-2 The County shall work to establish public/private partnerships to develop satellite and neighborhood work centers for telecommuting.

Note: This policy is intended for communities with significant numbers of information based workers who are now commuting long distances for employment.

Goal 4.C.4. Provide adequate sites for industrial development while minimizing the health risks to people resulting from industrial toxic or hazardous air pollutant emissions.

Policies

- 4.C.4-1 The County shall require residential development projects and projects categorized as sensitive receptors to be located an adequate distance from existing and potential sources of toxic emissions such as freeways, major arterials, industrial sites and hazardous material locations.

Note: This policy is intended to protect existing residential development and other sensitive receptors from conflicts with new industrial development. The types of businesses that are categorized as point sources are often incompatible with residential uses for a number of reasons including noise, truck traffic, visual concerns, and air quality. These are not the types of businesses encouraged for mixed-use developments or for commercial/office activity centers where we would expect more people to walk to work. The policy recognizes that businesses that are point sources are vital to the economy of Placer County and will be built, but that cities and counties must use care in planning their sites to avoid conflicts.

- 4.C.4-2 The County shall require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities to be located an adequate distance from residential areas and other sensitive receptors.

Goal 4.C.5. Reduce emissions of PM₁₀ and other particulates with local control potential.

Policies

- 4.C.5-1 The County shall work with the PCAPCD to reduce particulate emissions from construction, grading, excavation, and demolition to the maximum extent feasible.
- 4.C.5-2 The County shall reduce PM₁₀ emissions from County-maintained roads to the maximum extent feasible.

Goal 4.C.6. Develop local programs to minimize emissions from residential woodburning.

Policies

- 4.C.6-1 The County shall encourage developers to limit fireplace installations in new developments.
- 4.C.6-2 The County shall encourage developers to install low emitting, EPA certified fireplace inserts and/or wood stoves, pellet stoves or natural gas fireplaces.
- 4.C.6-3 The County shall encourage the Air Pollution Control District to establish a buy-back program for older, non-certified wood burning stoves.

Goal 4.C.7. Employ land use utilization strategies as a means of reducing mobile emissions.

Policies

- 4.C.7-1 The County shall encourage the Mixed-Use areas to provide commercial services such as day care centers, restaurants, banks, and stores near employment centers.
- 4.C.7-2 The County shall work closely with school districts to help them choose school site locations that allow students to safely walk or bicycle from their homes.

- 4.C.7-3 The County shall plan park and ride lots at suitable locations serving long distance and local commuters.
- 4.C.7-4 The County shall encourage infill of vacant parcels.
- 4.C.7-5 The County shall encourage project sites designed to increase the convenience, safety and comfort of people using transit, walking or cycling.
- 4.C.7-6 The County shall require an air quality/transportation design analysis for projects exceeding District CEQA significance thresholds (interim thresholds are 10 tons/year for ROG and NO_x).
- Note: The design analysis should be prepared by a civil engineer, architect, or urban designer familiar with design measures that can reduce trips. It could be part of the traffic study normally required for large development projects. This policy is intended to apply to large projects such as regional shopping centers and large subdivisions. Projects consistent with adopted County Design Guidelines or with a previously reviewed specific plan or community plan could be exempt.*
- 4.C.7-7 The County shall ensure that upgrades to existing roads (widening, curb and gutter, etc.) include bicycle and pedestrian improvements in their plans and implementation where appropriate.
- 4.C.7-8 The County shall discourage open outdoor burning in new residential development with densities greater than two dwelling units per acre.
- 4.C.7-9 The County shall require new large residential development proposals to reduce project air quality impacts below the significant level.

3.8.3 IMPACT EVALUATION CRITERIA

Appendix G of the State CEQA Guidelines state that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Cause a violation of an ambient air quality standard or worsen an existing violation
- Contribute substantially to an existing or projected air quality violation
- Expose sensitive receptors to substantial pollutant concentrations
- Conflict with adopted environmental plans, policies, or regulations for air pollutants
- Expose sensitive receptors to objectionable odors

In practice, the PCAPCD recommends use of a combination of quantitative and qualitative criteria described below. For the purposes of this EIR, impact are considered significant if the FDCP would:

- Cause emissions from all project-related sources (including mobile sources) to exceed the PCAPCD's New Source Review Rule, which includes the following thresholds:
 - ROG 82 lb/day
 - NO_x 82 lb/day

- CO 550 lb/day
- PM₁₀ 82 lb/day
- Cause or contribute to local CO concentrations exceeding 20 parts per million (ppm) over a 1-hour averaging period or 9 ppm over an 8-hour averaging period
- Expose sensitive receptors to toxic air contaminants that would adversely impact their health and well being, or
- Conflict with or obstruct implementation of any applicable air quality plans

3.8.4 IMPACTS AND MITIGATION MEASURES

3.8-1 New stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP will result in increased emissions of ROG, NO_x, CO and PM₁₀.

Upon FDCP buildout, operation of the new uses developed in accordance with the proposed Plan would cause increased emissions by generating new motor vehicle trips and by causing additional energy use and operation of other stationary sources of emissions. Workers, residents, tourists and visitors would generate approximately 12,918 average daily trips by the time of buildout. New residential, commercial and industrial land uses associated with the proposed Plan would also result in new emissions from the use of electricity, propane and wood for heating, cooling, ventilation and lighting. These are stationary- and area-source emissions that would be produced either directly in the Plan area, or indirectly through increased use of utilities located elsewhere. Motor vehicle use, energy use, and other stationary sources would cause emissions of ROG, NO_x, CO and PM₁₀ that would contribute to existing violations of the state-level and/or federal ambient air quality standards. Total emissions associated with buildout of the FDCP are presented in Table 3.8-4.

Table 3.8-4
Estimated Incremental Mobile Source Emissions

Emissions in lbs/day				
Use	Reactive Organic Gasses (ROG)	Nitrogen Oxides(NO _x)	Particulate Matter (PM ₁₀)	CO
Single Family Housing	104.45	77.13	94.18	918.83
Multiple Family Housing	6.38	4.33	5.28	51.55
Retail	38.70	17.26	19.32	198.92
Business/Professional	36.36	7.48	9.14	87.67
Industrial	19.86	18.77	23.35	220.63
High School	8.12	3.37	3.99	38.98
Total Emissions	213.89	128.33	155.26	1,516.58
Unit Type	Trip Rate	Size	Total Trips	Season
Single Family Housing	5.54 trips/ dwelling unit	2,208 du	12,232	Winter
Multiple Family Housing	3.99 trips/ dwelling unit	172 du	686	Winter

Emissions in lbs/day						
Use	Reactive Organic Gasses (ROG)		Nitrogen Oxides(NO _x)	Particulate Matter (PM10)	CO	
Retail	145 trips/acre		35 ac	4,060*	Winter	
Business/Professional	20 trips/acre		60 ac	1,200	Winter	
Industrial	35 trips/acre		70.5 ac	2,468	Winter	
High School	1.79 trips/student		400 students	716	Winter	
Total Trips				12,918		
Placer County Air Pollution Control District						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.0	5.0	5.0	12.0	5.0	5.0
Rural Trip Length (miles)	16.6	6.5	7.4	16.6	11.1	11.1
Trip Speed (mph)	35	35	35	35	35	35
Percent Trip-residential	27.3	21.2	51.5			
Vehicle Fleet Mix						
Vehicle Type	Percent Type		Non-Catalyst	Catalyst	Diesel	
Light Duty Autos	61		4.7	94.5	0.8	
Light Duty Trucks	25		12.8	88.9	0.7	
Medium Duty Trucks	7		12.5	79.2	8.3	
Light-Heavy Duty Trucks	1		18.2	72.7	42.4	
Medium-Heavy Duty Trucks	1		9.1	27.3	63.6	
Heavy-Heavy Duty Trucks	1		0	0	100.0	
Urban Busses	0		0	0	100.0	
Motorcycles	1		90.9	9.1	0	

- Minus 20% for pass-by trips.

Source: Quad Knopf, Inc., 2002.

The proposed FDCP includes the following goals and policies that address this impact:

Goal 4.C.1. Accurately determine and fairly mitigate the local and regional air quality impacts of projects proposed in the county.

Policies

4.C.1-1 The County shall determine project air quality impacts using analysis methods and significance thresholds recommended by the PCAPCD.

- 4.C.1-2 The County shall ensure all air quality impacts identified during CEQA review are consistently and fairly mitigated.
- 4.C.1-3 The County shall ensure all air quality mitigation measures are feasible, implementable and cost effective.
- 4.C.1-4 The County shall reduce the air quality impacts of development projects that may be insignificant by themselves, but cumulatively are significant.
- 4.C.1-5 The County shall encourage innovative measures to reduce air quality impacts.

Goal 4.C.2. Educate the public on the impact of individual transportation, lifestyle, and land use decisions on air quality.

Policies

- 4.C.2-1 The County shall work to improve the public's understanding of the land use, transportation, and air quality link.
- 4.C.2-2 The County shall encourage local public and private groups that provide air quality education programs.

Goal 4.C.3. Ensure that new development provides the facilities and programs that improve the effectiveness of transportation control measures and congestion management programs.

Policies

- 4.C.3-1 The County shall work with employers and developers to provide employees and residents with attractive, affordable transportation alternatives.
- 4.C.3-2 The County shall work to establish public/private partnerships to develop satellite and neighborhood work centers for telecommuting.

Goal 4.C.5. Reduce emissions of PM₁₀ and other particulates with local control potential.

Policy

- 4.C.5-2 The County shall reduce PM₁₀ emissions from County-maintained roads to the maximum extent feasible.

Goal 4.C.7. Employ land use utilization strategies as a means of reducing mobile emissions.

Policies

- 4.C.7-1 The County shall encourage the Mixed-Use areas to provide commercial services such as day care centers, restaurants, banks, and stores near employment centers.
- 4.C.7-2 The County shall work closely with school districts to help them choose school site locations that allow students to safely walk or bicycle from their homes.
- 4.C.7-3 The County shall plan park and ride lots at suitable locations serving long distance and local commuters.
- 4.C.7-4 The County shall encourage infill of vacant parcels.

- 4.C.7-5 The County shall encourage project sites designed to increase the convenience, safety and comfort of people using transit, walking or cycling.
- 4.C.7-6 The County shall require an air quality/transportation design analysis for projects exceeding District CEQA significance thresholds (interim thresholds are 10 tons/year for ROG and NO_x).
- 4.C.7-7 The County shall ensure that upgrades to existing roads (widening, curb and gutter, etc.) include bicycle and pedestrian improvements in their plans and implementation where appropriate.
- 4.C.7-8 The County shall discourage open outdoor burning in new residential development with densities greater than two dwelling units per acre.
- 4.C.7-9 The County shall require new large residential development proposals to reduce project air quality impacts below the significant level.

Although these goals and policies will assist in reducing emissions, development within the Plan area will contribute to regional emissions of these pollutants. Because the Plan area is currently within a nonattainment area for PM₁₀ and ozone and emissions will exceed PCAPCD thresholds, impacts must be considered *significant, unavoidable and cumulative*. Implementation of the FDCP goals and policies and compliance with PCAPCD New Source Review Rules will reduce these impacts, but not to a less than significant level.

Mitigation Measure

No additional mitigation measures are feasible.

3.8-2 Construction activities associated with development under the proposed FDCP will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations.

Construction activity often produces high levels of fugitive dust, including PM₁₀ particulate matter. Construction-related fugitive dust is generated primarily by grading activities and heavy equipment travel over temporary roads on-site. Fugitive dust emissions at a given construction site would vary daily, depending on the level and type of activity, silt content in the soil, and the weather. Such matter is highly susceptible to airborne movement by wind, and may affect air quality levels in adjacent sites (particularly PM₁₀ concentrations).

The proposed FDCP includes the following goal and policies that address this impact:

Goal 4.C.5. Reduce emissions of PM₁₀ and other particulates with local control potential.

Policy

- 4.C.5-1 The County shall work with the PCAPCD to reduce particulate emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

Construction of new development allowed by the proposed FDCP will occur over a period of many years, and it is not possible to know when PCAPCD thresholds may be exceeded. Many construction projects will be small (such as individual houses) and will not exceed thresholds.

However, it is possible that larger projects may be constructed (such as in the Mixed-Use areas, the new high school, and subdivisions) that will exceed thresholds. Because the Plan area is currently within a nonattainment area for PM₁₀ and ozone, and emissions may exceed PCAPCD thresholds, impacts must be considered *potentially significant, unavoidable and cumulative*. Implementation of the FDCP goals and policies and compliance with the PCAPCD Menu of Mitigation Measures in affect at the time of individual project construction will reduce this impact, but may not always reduce the impact to a level that is less than significant.

Mitigation Measure

No additional mitigation measures are available at the Community Plan level. New development which would exceed PCAPCD thresholds will require CEQA review, which could include mitigation measures specifically designed to address impacts associated with that project.

3.8-3 Implementation of the proposed FDCP could result in placement of sensitive land uses near potential sources of objectionable odors, dust, or toxic air contaminants.

Odors, dust, or toxic air contaminants can be emitted by stationary or area sources throughout the Plan area, although few potential sources exist. The occurrence and severity of potential odor impacts depend upon numerous factors. The nature, frequency, and intensity of the source, the wind speeds and direction, and the sensitivity of the receiving location each contribute to the intensity of the impact.

While offensive odors rarely cause any physical harm, they can be unpleasant and cause distress among the public and generate citizen complaints. Managing sources of odors is accomplished by regulatory requirements and appropriate land use planning. Odors are often associated with facilities such as wastewater treatment plants and certain types of industrial operations. No wastewater treatment plants are currently located within the Plan area. Any such plant proposed to be constructed in the future to serve a new development would require separate CEQA review. The types of industrial uses allowed by the FDCP are limited, and are not likely to produce offensive odors.

Diesel particulate emissions, a known toxic air contaminant (TAC), can be expected to occur within the Plan area during operation of motor vehicles and construction equipment. To address these emissions, statewide programs and regulations are presently being developed by the CARB that will lead to reduced risks from diesel exhaust. In light of the available information, the effects of the toxic emissions from existing and future vehicle operations in the Plan area are not expected to be substantial.

The proposed FDCP includes the following goal and policies that address this impact:

Goal 4.C.4. Provide adequate sites for industrial development while minimizing the health risks to people resulting from industrial toxic or hazardous air pollutant emissions.

Policies

- 4.C.4-1 The County shall require residential development projects and projects categorized as sensitive receptors to be located an adequate distance from existing and potential sources of toxic emissions such as freeways, major arterials, industrial sites and hazardous material locations.
- 4.C.4-2 The County shall require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities to be located an adequate distance from residential areas and other sensitive receptors.

In addition, Regulation 9 of the PCAPCD Rules and Regulations regulates toxic air contaminants. Implementation of the FDCP goals and policies and compliance with the PCAPCD Rules and Regulations will reduce impacts to a level that is *less than significant*.

Mitigation Measure

No additional mitigation measures are required.

3.8-4 Emission of pollutants from wood-burning appliances associated with residential uses.

The use of fireplaces and wood-burning stoves will contribute ozone precursor gases and particulates to the air. The EPA has established particulate emission limits for new wood stoves to reduce emissions to a maximum of 4.1 grams per hour for stoves with catalytic converters, and 7.5 grams per hour for stoves without catalytic devices. Since 1992, EPA has required all stoves sold in the U.S. to be certified. In addition, wood burning would primarily occur during the cold winter months, when ozone is less likely to form. However, temperature inversions typically occur in winter months that can cause wood smoke particulates to remain at ground level rather than dissipating.

The proposed FDCP includes the following goal and policies that address this impact:

Goal 4.C.6. Develop local programs to minimize emissions from residential woodburning.

Policies

- 4.C.6-1 The County shall encourage developers to limit fireplace installations in new developments.
- 4.C.6-2 The County shall encourage developers to install low emitting, EPA certified fireplace inserts and/or wood stoves, pellet stoves or natural gas fireplaces.
- 4.C.6-3 The County shall encourage the Air Pollution Control District to establish a buy-back program for older, non-certified wood burning stoves.

As air quality rules and regulations become increasingly stringent, it is likely that the CARB and/or the PCAPCD will severely limit or ban wood-burning fireplaces during the planning period, and place increasing restrictions on the types of wood-burning stoves that can be installed in new developments. Certain restrictions already exist in the Squaw Valley area of Placer County. Compliance with the goal and policies of the FDCP and CARB and PCAPCD rules and regulations will reduce impacts to a level that is *less than significant*.

Mitigation Measure

No additional mitigation measures are required.

3.9 TRANSPORTATION AND CIRCULATION

3.9.1 INTRODUCTION

The Transportation and Circulation section of this EIR analyzes the transportation and circulation impacts associated with development in accordance with the FDCP, including roadways, transit services, and pedestrian and bicycle facilities. The traffic analysis is conducted under existing and cumulative conditions. The full text of the traffic studies completed by kdAnderson Transportation Engineers and Martin Rivett & Olson is included as Appendix C of this EIR.

3.9.2 SETTING

PURPOSE

The Transportation and Circulation Element of the Foresthill Divide Community Plan is intended to serve the following purposes:

- Establish goals and policies to guide the development and operation of the transportation system
- Describe existing transportation conditions and circulation features within the Plan area
- Describe future transportation conditions resulting from development of the Plan area in accordance with proposed land uses
- Identify improvements to, and development of, the transportation system to ensure the provision of a safe, efficient and multi-modal transportation system consistent with the established goals and policies, and
- Identify a method for financing the identified transportation needs in the Plan area.

The Circulation Element is one of the seven mandatory General Plan elements. All of the topics required to be addressed in a Circulation Element by State law are covered in the Placer County General Plan. The purpose of the Transportation and Circulation Element of the Foresthill Divide Community Plan is to address topics specific to the Plan area, which are of particular interest to residents of the Foresthill Divide.

The future circulation system is also presented in map form, as Figure V-1 of the Foresthill Divide Community Plan (Figure 2-5 of this EIR).

Foresthill is served by a system of County Roads. The existing roadways in the Plan area are primarily two-lane rural facilities. Existing traffic volumes are low to very low, and all roads operate at LOS “C” or better. All of the major roadways intersect with Foresthill Road, which serves as the backbone of the roadway system in the Plan area. The need to maintain an acceptable LOS “C” on Foresthill Road is a major constraint to future development in the Plan area. The dependence on this roadway also raises concerns regarding emergency response and the potential need to evacuate the Plan area.

Because of the rural low density nature, topography and size of the Plan area, bicycle and pedestrian facilities and transit service are limited. However, many trails are located in the Plan area. This trail system offers the potential for future extensions and linkages to better serve Plan area residents as well as tourists/recreationists.

EXISTING TRANSPORTATION SYSTEM

An inventory and evaluation of the operating characteristics of the existing circulation system within the Foresthill Divide Community Plan area is the initial task required to develop a comprehensive plan to guide transportation planning in the Plan area in the future. To understand existing travel characteristics and conditions, all major aspects of transportation in the Plan area have been inventoried and analyzed. The following sections discuss existing roadway functions, traffic volumes, and traffic Level of Service, as well as transit, rail service, airports and bicycle routes.

STREETS AND HIGHWAYS

Functional Classification

The Plan area is served by a system of County roads. The existing roadways in the Plan area are primarily comprised of two-lane rural facilities reflecting the rural nature of the county. A description of some of the study area roadways is presented below. Daily traffic counts were conducted during May 2000, and these counts are presented in the roadway descriptions.

The existing roadway system and current traffic volumes for the Plan area are illustrated in Figure 3.9-1.

Foresthill Road. Foresthill Road is a two-lane rural roadway. This roadway provides the principal link between Auburn and Foresthill. This road also serves as the main route along the Divide, and continues easterly to Soda Springs.

Foresthill Road currently carries 6,650 average daily traffic (ADT) east of the two-lane Foresthill bridge of the North Fork of the American River. East of Happy Pines Drive, daily traffic volumes on Foresthill Road reach 4,876 ADT. West of Owl Hill Court, traffic volumes on Foresthill Road rise to 5,312 ADT. East of the community of Foresthill, daily traffic volumes on Foresthill Road drop significantly. West of Michigan Bluff Road, Foresthill Road currently carries 796 ADT, with daily traffic volumes on Foresthill Road dropping to 481 ADT east of Michigan Bluff Road.

Portions of Foresthill Road were reconstructed in 2000. This 6.9-mile stretch of road was the last of three phases to be completed under a Federal Highway Administration contract. This project added passing lanes and widened and realigned many of the stretches of Foresthill Road between Auburn and Foresthill.

Yankee Jim's Road. Yankee Jim's Road is a narrow two-lane roadway. This roadway connects the community of Foresthill to Canyon Way just south of the City of Colfax. Currently, Yankee Jim's Road carries 186 ADT north of Race Track Street.

Spring Garden Road. Spring Garden Road is a two-lane roadway. This roadway extends between Foresthill Road in the south and Yankee Jim's Road in the north. Currently, Spring Garden Road carries 624 ADT.

McKeon-Ponderosa Way. McKeon-Ponderosa Way is a two-lane roadway. This roadway originates at Foresthill Road in the north. Extending to the south, McKeon-Ponderosa Way provides access to the west end of the Todd's Valley area before winding further south toward the Middle Fork American River Canyon. Currently, McKeon-Ponderosa Way carries 1,495 ADT just south of Foresthill Road.

Happy Pines Drive. Happy Pines Drive is a two-lane roadway that provides access to Todd's Valley. Originating at Foresthill Road, Happy Pines Drive extends to the south through Todd's Valley before terminating at Green Leaf Lane just south of Todd's Creek. Currently, Happy Pines Drive carries 1,293 ADT.

Todd Valley Road. Todd Valley Road is also a two-lane roadway. Within the Todd's Valley area, Todd Valley Road originates at Foresthill Road. Extending to the south, Todd Valley Road loops to the east and then back to the north to terminate at Foresthill Road. Currently, Todd Valley Road carries 2,663 ADT on the eastern loop just south of Foresthill Road. The daily traffic on the west portion of the loop is substantially lower, with daily traffic volumes of 319 ADT just south of Foresthill Road.

Mosquito Ridge Road. Mosquito Ridge Road is a two-lane roadway in the vicinity of the community of Foresthill. Originating at Foresthill Road, Mosquito Ridge Road winds to the northeast into the Tahoe National Forest. Mosquito Ridge Road currently carries 230 ADT just east of Foresthill Road.

Race Track Street. Race Track Street is a two-lane roadway. Originating at Foresthill Road in the west, Race Track Street parallels Foresthill Road to the north, north of Mosquito Ridge Road before terminating in the east at Yankee Jim's Road. Currently, Race Track Street carries 901 ADT east of Foresthill Road.

Main Street. Main Street is a two-lane roadway that parallels Foresthill Road to the south within the community of Foresthill. Extending from Foresthill Road in the west, Main Street provides access to the local businesses before connecting to Foresthill Road at the east end of town. Currently, Main Street carries 691 ADT just east of Foresthill Road.

Michigan Bluff Road. Michigan Bluff Road is a two-lane roadway that provides access from the community of Michigan Bluff north to Foresthill Road. Michigan Bluff Road currently carries 200 ADT south of Foresthill Road.

North Fork Ponderosa Way. North Fork Ponderosa Way is a two-lane facility that originates at Foresthill Road west of Todd's Valley. Extending to the north, North Fork Ponderosa Way winds its way toward Weimar.

The following key intersections outside the Plan area but in the vicinity of the I-80/Auburn Ravine Road/Foresthill Road interchange were also studied for this EIR, as shown in Figure 3.9-2:

- Auburn Ravine Road/Bowman Road/I-80 westbound on-ramp
- Auburn Ravine Road/I-80 westbound off-ramp
- Auburn Ravine Road/I-80 eastbound ramps
- Auburn Ravine Road/Foresthill Road/Lincoln Way

A brief description of the key roadways in the vicinity of these study intersections is presented below.

Auburn Ravine Road is a two-lane roadway that provides access to Interstate 80 (I-80) and the commercial area surrounding the freeway interchange. Within the study area, Auburn Ravine Road is an east-west facility, but west of Bowman Road it curves to the south. East of Lincoln Way, Auburn Ravine Road becomes Foresthill Road.

Foresthill Road is a two lane, east-west road east of Lincoln Way. This road provides the primary connection between Auburn and the Foresthill community. Just east of the Foresthill Bridge over the American River, Foresthill Road carries about 6,650 vehicles per day.

Bowman Road is a north-south frontage road along the west side of I-80. It provides access to a number of commercial uses between Auburn Ravine Road and Bell Road to the north.

Lincoln Way serves as a north-south frontage road in the study area, running along the east side of I-80. It also provides direct access to downtown Auburn, a short distance to the south.

SCENIC CORRIDORS

Because of the special scenic qualities of certain areas in the Plan area, those roads traversing these areas are recommended to be protected by special measures to enhance scenic viewsheds.

- Foresthill Road within the Plan area and to Robinson Flat.
- Mosquito Ridge Road to Robinson Flat Road.
- Robinson Flat Road from Mosquito Ridge Road to Foresthill Road.

ROADWAY OPERATIONS

Level of Service Methodology

To assess the quality of existing traffic conditions in the Plan area, Levels of Service have been identified for arterial and collector facilities. “Level of Service” is a qualitative measure of traffic operating conditions whereby a letter grade “A” through “F”, corresponding to progressively worsening traffic conditions, is assigned to an intersection or roadway segment. Current evaluation methodology is dependent upon the physical characteristics of the roadway segment or intersection, and can additionally be categorized with respect to “urban” or “rural” conditions. Table 3.9-1 presents a description of the Levels of Service associated with two-lane rural highways.

The identified thresholds reflect information contained in the Placer County General Plan, as well as new information that reflects the character of Foresthill Road. Specifically, the effects of climbing lanes on average travel speed and resulting Levels of Service have been incorporated into these thresholds. Climbing lanes have the effect of raising Level of Service thresholds, although the overall capacity of the road remains constrained by the two lane sections.

Table 3.9-1

Two-Lane Rural Highway Level of Service Descriptions

LOS	Description
A	Free Flow: Almost no platoons of three or more cars. Driver delayed no more than 30 percent by slow moving vehicles.
B	Free Flow: Some platoons form. Driver delayed no more than 45 percent by slow moving vehicles.
C	Stable Flow: Noticeable increase in platoon formation and size. Drivers delayed no more than 60 percent by slow moving vehicles.
D	Approaching Unstable Flow: Heavy platooning. Passing becomes difficult. Drivers delayed no more than 75 percent by slow moving vehicles.
E	Unstable Flow: Intense platooning. Passing is virtually impossible. Drivers delayed more than 75 percent by slow moving vehicles.
F	Forced Flow: Queues form behind breakdown points.

Source: Highway Capacity Manual, Transportation Research Board, 1985 and kdAnderson Transportation Engineers, 2002.

The Level of Service characteristics of study roadways in the Plan area will vary in relation to terrain and passing opportunities. In order to utilize appropriate evaluation criteria, the Plan area roadway characteristics need to be determined. Toward this end, the roadways in the Plan area were classified based on the individual roadway characteristics. Roadways within the rural area of the county were either classified as “mountainous” if they had steep grades or as “rolling.” The “rolling” classification was further disaggregated based on the presence of passing/climbing lanes. The passing/climbing lane percentages were calculated based on field data. Roadways in the Plan area that comprise the local street system were classified as Arterials based on operations.

Table 3.9-2 presents the evaluation criteria that were used to determine the Level of Service operations on each of these roadways. The daily capacity thresholds account for roadway operating characteristics such as directionality, percentage of trucks and recreational vehicles, and the percentage of passing lanes. As shown, the presence of passing lanes on a two-lane roadway can substantially increase the Level of Service thresholds, as these passing lanes provide motorists the opportunity to travel around slower moving trucks and vehicles. While these passing lanes do provide an increasing benefit as the percentage of passing lanes increases, there is a limit. Roadways with higher passing percentages reach this “capacity limit” but still provide a good Level of Service. As shown under the two-lane rolling criteria with 71% passing lanes, the maximum daily traffic threshold on this section increases quickly to a point that reaches the ultimate capacity of the roadway at LOS “C” operations. Once the maximum capacity of the roadway is reached, the two-lane section becomes the constraint and no more vehicles can physically be delivered by the roadway system, even with an increase in the percentage of passing lanes. Therefore, while motorists experience unimpeded operations on the two-lane uphill sections, the overall roadway capacity is still constrained by the two-lane sections.

Table 3.9-3 presents the operating Levels of Service for each of these study roadways. As shown, currently all of the study roadways operate at Level of Service “C” or better.

Foresthill Road is used for tourist travel between the Auburn area, the Tahoe National Forest and the Auburn State Recreation Area. Approximately 900,000 tourists visit the Foresthill area of the Tahoe National Forest annually (Rich Johnson, Tahoe National Forest, pers. comm., June 2002). Forest Service staff also indicated that the two main routes into the National Forest (i.e., Foresthill Road east of Foresthill and Mosquito Ridge Road) were utilized about equally, and while the summer tourist crowd is still larger than the winter tourist crowd, the number of patrons traveling during the winter is increasing rapidly. Based on information provided by Forest Service staff, and accounting for such factors as carpooling and weekend vs. weekday traffic, it is estimated that tourist traffic accounts for a total of 570± weekday trips on Foresthill Road between Auburn and Foresthill. In the future, tourist traffic to the Tahoe National Forest is assumed to double, which equates to a 3.5 percent annual growth rate over the next 20 years (this assumption is based on consultation with County staff and the professional judgment of the traffic consultants).

Table 3.9-2
Evaluation Criteria for Level of Service

Roadway Capacity Class	Maximum Daily Traffic Volume Level of Service				
	A	B	C	D	E
1. Rural 2-lane – Rolling w/o Passing Lane	1,060	3,400	6,400	9,780	18,540
2. Rural 2-lane – Rolling w/39% Climbing Lanes	1,060	4,520	10,710	14,190	18,540
3. Rural 2-lane – Rolling w/40% Climbing Lanes	1,060	4,600	10,880	14,430	18,540
4. Rural 2-lane – Rolling w/43% Climbing Lanes	1,060	4,860	11,450	15,170	18,540
5. Rural 2-lane – Rolling w/71% Climbing Lanes	1,060	9,940	18,540	18,540	18,540
6. Rural 2-lane – Rolling (PCGP)	1,600	4,200	7,200	11,400	21,000
7. Rural 2-lane – Mountainous (PCGP)	800	2,400	4,200	7,200	14,000
8. Arterial – Low Access Control (PCGP)	7,000	10,500	12,000	13,740	15,000

Source: Placer County General Plan; kdANDERSON Transportation Engineers, based upon Highway Capacity Manual, Transportation Research Board, 1985.

Table 3.9-3

Existing Daily Roadway Traffic Volumes and Levels of Service (Weekdays)

Roadway	Location	Criteria	Daily Traffic	LOS
Foresthill Rd	Foresthill Bridge to Drivers Flat	Rural w/39% climbing	6,650	C
Foresthill Rd	Drivers Flat to Spring Garden	Rural w/40% climbing	4,876	C
Foresthill Rd	Todd Valley Rd. (w) to Idle Wheels Mobile Home Park	Rural w/43% climbing	5,312	C
Foresthill Rd	Idle Wheels Mobile Home Park to Michigan Bluff Rd	Arterial	796	A
Foresthill Rd	E of Michigan Bluff Rd	Arterial	481	A
McKeon-Ponderosa	S of Foresthill Rd	Rural w/out passing	1,495	B
Spring Garden Rd	N of Foresthill Rd	Rural-Mountainous	624	A
Happy Pines Dr	S of Foresthill Rd	Rural w/out passing	1,293	B
Todd Valley Rd (W)	S of Foresthill Rd	Rural w/out passing	2,663	B
Todd Valley Rd (E)	S of Foresthill Rd	Rural w/out passing	319	A
Mosquito Ridge Rd	S of Foresthill Rd	Rural-Mountainous	230	A
Yankee Jim's Rd	N of Race Track St	Rural-Mountainous	186	A
Main St	S of Foresthill Rd	Arterial	691	A
Michigan Bluff Rd	S of Foresthill Rd	Rural w/out passing	200	A
Race Track St	N of Foresthill Rd	Arterial	901	A

Source: kdAnderson Transportation Engineers, 2003.

Analysis Methodology, I-80 Interchange Analysis

Intersection operations are typically described in terms of Level of Service (LOS), which is reported on a scale from LOS A (representing free-flow conditions) to LOS F (which represents substantial congestion and delay). The Level of Service designations are based on a quantitative calculation of delay at the intersection. The specific approach to estimating delay is based on procedures documented in the *Highway Capacity Manual* (Transportation Research Board, 2000). Descriptions of operating conditions and delay values for signalized intersections are presented below. The technical calculations completed for this study are presented in Appendix C of this EIR.

The study intersections, all of which are signalized, were analyzed using the “operational analysis” methodology presented in the year 2000 edition of the *Highway Capacity Manual* (*HCM 2000*). This methodology determines signalized intersection Level of Service by comparing the “average control delay per vehicle” to the thresholds shown in Table 3.9-4. Control delay represents the delay directly associated with the traffic signal. For this analysis, the Level of Service calculations were performed using the *Synchro 5* software package, which implements the intersection analysis procedures documented in the *HCM 2000*.

To ensure a conservative analysis of conditions at the two freeway off-ramp intersections, it was assumed that right-turns-on-red are impossible from those off-ramps onto Auburn Ravine Road. Field observations revealed that, because of the short intersection spacing along this section of Auburn Ravine Road, standing queues from the adjacent intersections often effectively block the ability of such right turns to be made. At the I-80 westbound off-ramp, the queues extend eastward from Bowman Road while at the I-80 eastbound ramp, queues generated at the Auburn Ravine/Forest Hill Road/Lincoln Way intersection regularly extend back to, and even through, the off-ramp intersection.

Refer to the discussion of Level of Service standards for signalized intersections under Impact Evaluation Criteria, p. 3-209 and 3-210, for further information.

Table 3.9-4
Level of Service Definitions
Signalized Intersections

Level of Service	Description	Average Control Delay (Seconds/Vehicle)
A	Very low delay. Most vehicles do not stop.	≤ 10.0
B	Slight delay. Generally good signal progression.	10.1 – 20.0
C	Increased number of stopped vehicles. Fair signal progression.	20.1 – 35.0
D	Noticeable congestion. Large proportion of vehicles stopped.	35.1 – 55.0
E	Operating conditions at or near capacity. Frequent cycle failure.	55.1 – 80.0
F	Oversaturation. Forced or breakdown flow. Extensive queuing.	> 80.0

Source: *Highway Capacity Manual* (Transportation Research Board, 2000).

Existing Traffic Volumes

PM peak-period turning movement counts were conducted at the four study intersections on July 12, 2002. The traffic counts were performed in connection with a detailed analysis of traffic operations at the I-80/Auburn Ravine Road interchange by Fehr & Peers Associates, under contract to Placer County. Because the counts were conducted on a summer Friday, they include a substantial amount of weekend recreational traffic in the I-80 corridor. As such, the counts represent higher-than-typical traffic volumes, thereby providing a conservative indication of traffic operations at the study intersections. The peak-hour volumes and existing intersection lane configurations are shown on Figure 3.9-3.

Existing Intersection Level of Service

Table 3.9-5 summarizes the existing PM peak-hour Levels of Service at each study intersection. Appendix C contains the technical calculation sheets.

All four study intersections operate at LOS “D” or better in the PM peak hour. The intersections of Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp and Auburn Ravine Road/I-80 Westbound Off-ramp operate at LOS “B”. The intersection of Auburn Ravine Road/I-80 Eastbound Ramps operates at LOS “D,” and Auburn Ravine Road/Foresthill Road/Lincoln Way operates at LOS “C”.

Thus, according to the Level of Service standard being employed in this analysis, the four existing study intersections operate at acceptable Levels of Service in the PM peak hour.

Table 3.9-5
Level of Service Summary
Existing Conditions

Intersection	Traffic Control	PM Peak Hour	
		Delay ¹	LOS ²
Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp	Signal	19.2	B
Auburn Ravine Road/I-80 Westbound Off-ramp	Signal	10.3	B
Auburn Ravine Road/I-80 Eastbound Ramps	Signal	36.8	D
Auburn Ravine Road/Foresthill Road/Lincoln Way	Signal	30.4	C
Notes: ¹ Average control delay (seconds per vehicle) ² Level of Service			

Source: Martin, Rivett & Olson, 2003.

ALTERNATIVE TRANSPORTATION SYSTEMS

Motorized

The Consolidated Transportation Service Agency (CTSA) provides public mass transportation service in the Plan area. CTSA operates one bus daily between Foresthill and Auburn. The bus makes five scheduled stops within the community of Foresthill. The first pickup is at Forest House at 7:45 a.m., with the last pickup at the Todd’s Valley Mobile Home Park at 8:05 a.m. before the bus travels to Auburn. In Auburn, the bus drops off all riders at the Elders Transfer Station. In the afternoon, the route is reversed, and the bus leaves Auburn at 3:30 p.m. and travels back to Foresthill. The cost of a bus ride is \$2.50.

The Plan area is not served by freight or passenger rail service. The Plan area is not served by a public/commercial airport. The closest airports to Foresthill are the Georgetown Airport and Auburn Municipal Airport.

Non-Motorized

Non-motorized, alternative transportation includes pedestrian, equestrian, and bicycle activity. Both bikeway and pedestrian facilities used for transportation purposes within the Plan area are limited (however, trails used for recreational purposes are abundant). Limited sidewalks exist in the downtown Foresthill area, and bicyclists must share the roadways with motorists. This type of transportation is the most inexpensive to provide for and has the least impact on the environment. Non-motorized transportation can foster a built environment that is more accessible, livable, and interesting because it is scaled to the pedestrian and not the automobile.

Because of the rural nature and sparse population within the Plan area, the Foresthill Divide is reliant upon automobile usage. However, there is a community trail system that encourages pedestrian, equestrian, and bicycle use within the community for purposes of travel and recreation. Many of the Forest Service trails, BLM trails, community trails, and State Recreation Area trails accommodate equestrians and mountain bikers; the Foresthill Divide Loop trail serves as an alternative mode of non-motorized transportation along both sides of Foresthill Road, although it is not continuous.

Despite the inevitable dependence on automobiles, non-motorized transportation should be nurtured within the Plan area. The proposed equestrian staging area would provide support facilities for equestrians utilizing the community trails system. This type of facility would encourage non-motorized transportation and contribute to the rural character of the Plan area. Bicycling should be encouraged as well, especially within the townsite and developed areas. Bicycling, horseback riding, and walking are efficient, inexpensive, and fun means of transportation that are consistent with the character and direction of the community.

FUTURE CIRCULATION SYSTEM

The future circulation system for the Foresthill Divide Community Plan area is comprised of both existing roadways and new streets. The existing roadways identified in the Plan include: Foresthill Road, Spring Garden Road, Yankee Jim's Road, Mosquito Ridge Road, Iowa Hill Road, McKeon-Ponderosa Way, Happy Pines Drive, Todd Valley Road, Race Track Street, Main Street, Michigan Bluff Road, and North Fork Ponderosa Way. These existing roadways are described above in Existing Transportation System.

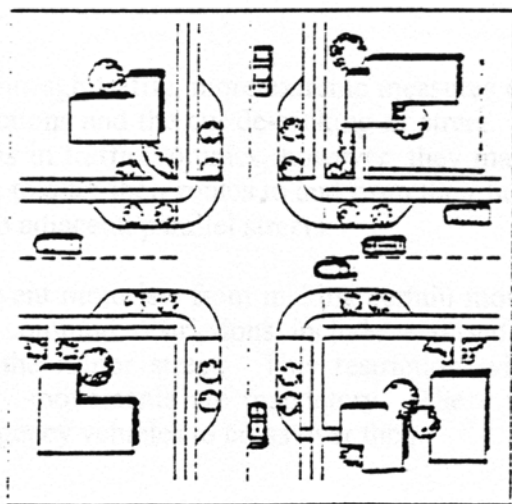
The balance of the Community Plan circulation system is to be comprised of three new/upgraded facilities that will complete the overall circulation system, provide parallel routes to Foresthill Road, and link the existing circulation system to existing/future development. Descriptions of each of these facilities are presented below. The future roadway extensions, in addition to providing linkages within the Plan area, will provide alternative parallel routes to Foresthill Road, decreasing traffic volumes on Foresthill Road within the Core Area. Some of the proposed roadway alignments will require acquisition of right-of-way by the County. The future circulation system is also presented in map form, as Figure V-1 of the Foresthill Divide Community Plan (Figure 2-5 of this EIR).

Power Line Road. Power Line Road, which is currently unimproved, is to be upgraded to a 32-foot rural secondary road along its current alignment. This facility will extend from Spring Garden Road in the west to ultimately connect with Foresthill Road in the east in the vicinity of the new high school site.

Yankee Jim's Road - Connection to Foresthill Road Adjacent to the New High School Site. A new connection is proposed to link Yankee Jim's Road to Foresthill Road adjacent to the new high school site. The exact alignment of this new connection has not been determined.

Patent Road Extension. Patent Road will be extended from its current terminus just east of Todd's Valley Road to Mosquito Ridge Road in the east. While the exact alignment of this new facility has not been determined, it will likely be located just south of the planned development in the area, thereby forming a new east-west connection that parallels Foresthill Road to the south. The connection with Mosquito Ridge Road will most likely be located very close to Foresthill Road based on existing topography. In addition, the existing stretch of Todd Valley Road is to be upgraded from Patent Road westward to its existing upgraded section that lies just east of Green Ridge Drive.

TRAFFIC CALMING MEASURES

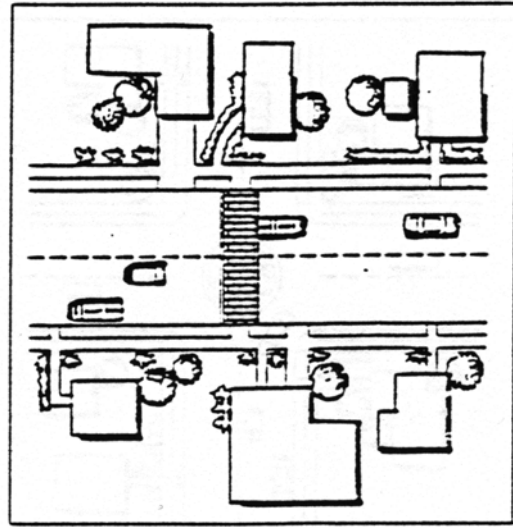


The Foresthill Divide Community Plan incorporates policies that promote the use of traffic calming measures in the Core Area. Traffic calming measures will assist in the implementation of the Foresthill Community Design Guidelines, which focus on making a comfortable and safe environment for pedestrians, providing safe and convenient pedestrian connections, facilitating pedestrian circulation within and between commercial sites and nearby residential areas, and creating a “sense of arrival” at commercial entries. Three general types of traffic calming measures can be used to control speed and inhibit cut-through traffic. These can be characterized as vertical measures, horizontal measures and narrowings. Vertical controls use vertical acceleration forces to reduce vehicle speed.

Horizontal measures use lateral acceleration forces to inhibit speed, while narrowings use the perceptive sense of enclosure to discourage speeding and inhibit through traffic. Aesthetics play an important role in the acceptance of traffic calming measures.

The use of traffic calming measures in the Core Area may pose difficulties for through truck traffic on Foresthill Road. Some of the traffic calming measures described below may be incompatible with the use of snowplows.

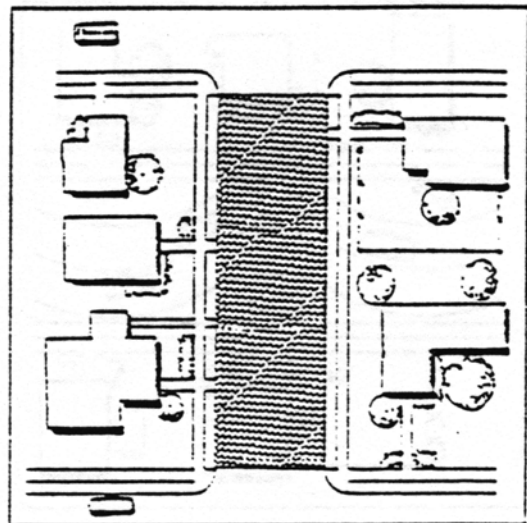
Vertical Controls. The most common form of vertical control is the speed hump or undulations. They are the most common form of traffic calming and are typically the least expensive to install and maintain, although they are not suitable in areas serviced by snowplows. Other types of vertical controls include raised intersections, raised crosswalks, and textured pavements.

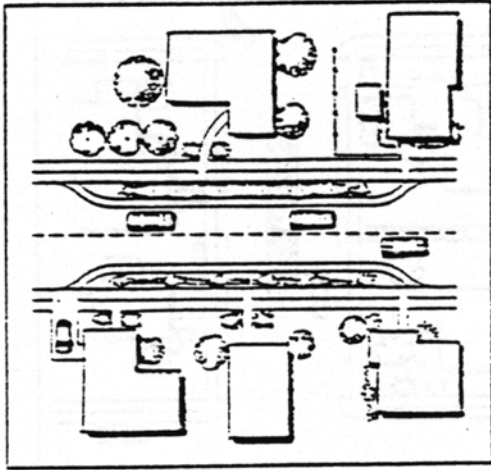


Horizontal Controls. Horizontal measures achieve their desired results by forcing drivers around horizontal curves and blocking long views of the road ahead. The most common types of horizontal measures are traffic circles, chicanes, realigned intersections, lateral shifts, single lane slow point, two lane angled slow point, mid block road closures, and traffic islands. Roundabouts (traffic circles) are an alternative to traffic signals, and often minimize traffic delays resulting from signalization. Not all intersections are good candidates for roundabouts.

Narrowings. Roadway narrowings are usually accomplished by plantings and other vertical elements to draw attention to the constriction. These narrowings include chokers, center island channelization, gateways and neckdowns. Bicycle lanes can provide narrowing of a roadway by reallocating the roadway width. They can assist in narrowing wide streets by reducing the through lane width to standard 12-foot wide lanes or narrower 10 or 11-foot lanes. Bicycle lanes alone may provide some relief from speeding vehicles.

Combination of Measures. The use of traffic calming measures often requires an approach that utilizes a variety of measures to reach the most effective reduction in speed and/or traffic volumes. Many communities have combined treatments at select locations, while other approaches include combinations of measures at different locations along the same street. Some of the measures that have been combined in communities include gateways with center islands, chokers and speed humps, center islands and chokers, traffic circles and neckdowns, and raised crosswalks with chokers. The use of multiple measures should be considered, depending on the goals of the project. For example, if the goal along a neighborhood street is to support access to a local park, the use of a choker may not provide reduced speeds that will encourage pedestrians to cross the street. The use of hybrid measures, including multiple narrowings and deflections, typically provides the needed measures to effect the desired changes.





Signings and Markings. Signings and markings should be placed in advance of and within the traffic calming measures, using conventions identified in the Manual of Uniform Traffic Control Devices (MUTCD). These include warning signs in advance of the measures, regulatory warning signs at the measures themselves, as appropriate, markers delineating island approaches, and pavement markings to guide vehicles along the desired travel paths.

Other Considerations. Emergency vehicle response is a key element in determining the appropriateness of varying traffic calming measures. Traffic calming measures, if effective, will increase the

response time for emergency vehicles. A balance of reducing speeds while maintaining prompt emergency response needs to be considered when developing traffic calming measures. The Sheriff's Department and the affected fire district should be involved in potential solutions.

Traffic calming features need to be designed to accommodate public works facilities and maintenance of local streets. Calming measures such as chokers can impact the drainage along a street if not installed properly. Measures need to be designed to assure that utilities will not be affected by installation of traffic calming measures, and driveway locations need to be considered to minimize the impact for residents of the area.

Successful implementation of any traffic calming measures includes collaboration between County officials and staff and the community. Neighborhood and community input during the initial stage of analysis and design is critical to the success of the traffic calming program.

GOALS AND POLICIES

The proposed FDCP includes the following goals and policies related to transportation and circulation:

Goal 5.1. Provide for the safe and efficient movement of people and goods on the primary roadway serving the Foresthill Divide, i.e., Foresthill Road.

Policies

- 5.1-1 Establish and maintain a Level of Service (LOS) of "C" or better on Foresthill Road between Auburn and the Idle Wheels Mobile Home Park and "D" or better between the Idle Wheels Mobile Home Park and east of the Foresthill Elementary School.
- 5.1-2 The recent improvements to Foresthill Road should be extended to Mosquito Ridge Road. Placer County should continue to pursue all appropriate sources of funding for these improvements. An interim plan for improving Foresthill Road with County resources focusing on the most dangerous sections should be developed.

- 5.1-3 As roadway improvements are made, seek to reduce the number of access points in developed areas on Foresthill Road and provide left-turn lanes for frequently used access points, or a two-way left turn lane for dense-access areas.
 - 5.1-4 Proponents of new development projects should analyze the project's contribution to increased traffic on Foresthill Road and implement improvements necessary to address the increase. Mitigation of significant project-related impacts may require improvements beyond those addressed by the Placer County traffic impact mitigation fee program.
 - 5.1-5 Road improvements along Foresthill Road should include a Class I bikeway (off-street bike trail or path which is physically separated from the roadway) between major residential areas and downtown Foresthill, i.e., currently between the Spring Garden Road and Black Hawk Road. As new residential neighborhoods are developed, the Class I bikeway should be extended to reach them. New development projects that border Foresthill Road should include the bikeway as part of their development plans. The bikeway may utilize existing road, water, power line or fire access easements where appropriate. The bikeway may be developed along the edge of the proposed improved Foresthill roadway in advance of or in conjunction with Federal, State and/or County-funded improvements.
 - 5.1-6 A Class II bikeway (on-street bike lanes with signs, striped lane markings, and pavement legends) or Class I bikeway should be implemented along the rest of Foresthill Road between Auburn and the intersection of Sugar Pine Road.
 - 5.1-7 Community organizations, businesses and individuals are encouraged to sponsor sections of the proposed Class I bikeway, working with Placer County, community representation (Foresthill Forum) and nearby property owners to plan and develop their section. Placer County should pursue all appropriate sources of funding for development of the bikeway.
 - 5.1-8 The County shall post notice of any non-emergency closures of Foresthill Bridge, or any section of Foresthill Road, at least 7 days before closure. Such notices shall be placed on road signs at the Foresthill Bridge, Foresthill Road at its intersection with Lincoln Way, Lower Clementine Road and Spring Garden Road. In addition, the County shall send notices of closure to local newspapers. The County shall examine requiring community compensation for closures for non-public purposes (e.g., filming).
 - 5.1-9 The Foresthill Road right-of-way shall be maintained according to CDF "Shaded Fuel Break" standards in order to improve sight distance and reduce collisions between wildlife and vehicles.
- Goal 5.2. Provide for safe emergency access and alternative routes onto the Foresthill Divide and to provide river and canyon access for recreational purposes.**

Policies

- 5.2-1 Regular maintenance on Ponderosa Way, Yankee Jim's Road, Iowa Hill Road, Old Foresthill Road, Mosquito Ridge Road, Lower and Upper Lake Clementine Road, Mammoth Bar Road and Driver's Flat Road shall be performed by the County. Dirt roads should be graded regularly and drainage problems corrected. Bridges should also be inspected regularly and preventive maintenance performed by Placer County. Placer County, BLM, USFS, State Parks and Recreation, CDF, and local community groups and residents should coordinate efforts and funding to maintain these roads.
- 5.2-2 Opportunities to improve secondary access roads with all appropriate sources of funding, including traffic mitigation fees from new development and freight traffic mitigation fees, should be pursued.

- 5.2-3 Long-standing public access roadways (those used by the public for 5 years or more) such as McKeon-Ponderosa Way, Nugget Drive, Power Line Road, Indian Lane and Harrison Street shall be open and maintained (inspected annually and graded as needed) to provide emergency fire and recreational access to river canyon areas and other areas on the Divide. The County shall coordinate efforts with State Parks and Recreation, BLM and CDF to maintain these roads.

Goal 5.3. Provide for efficient, safe and pleasant circulation on local and collector roads throughout the community.

Policies

- 5.3-1 New development projects should incorporate collector or arterial road segments that connect to and take advantage of existing access to existing neighborhoods, if possible, and minimize the impact of egress and congestion on Foresthill Road.
- 5.3-2 Arterial and collector roads shall be protected from unrestricted driveway access in order to enhance secondary circulation. Possible candidates include Spring Garden Road, Happy Pines Drive, Cold Springs Road, Red Rock Drive, McKeon-Ponderosa Way, Todd Valley Road, Thomas Street, Power Line Road, Yankee Jim's Road and Michigan Bluff Road. These roads should have bike lanes or adjacent trails and safe bus stops that do not impede traffic.
- 5.3-3 Road easements in new developments shall include space for at least a five-foot multi-purpose roadside trail, or equivalent off-road trail network to enable children, equestrians, bicyclists, and pedestrians to safely circulate throughout the neighborhood.
- 5.3-4 Install traffic calming measures as appropriate within the Core Area to reduce speeds and create a bicycle- and pedestrian-friendly environment.

Goal 5.4. Enhance circulation within the Core Area.

Policies

- 5.4-1 The Streetscape Master Plan that has been developed should guide new development and enhancement efforts within this area.
- 5.4-2 New and existing businesses shall provide adequate parking for the patrons of their facilities in compliance with the Foresthill Mixed-Use Development Standards. The visual impact of parking lots shall be considered during design review.
- 5.4-3 The Core Area shall be a "pedestrian friendly" zone. The County right-of-way along Foresthill Road, Main Street and Soap Street shall provide space for at least a five-foot path on properties adjacent to roadways for pedestrians. This path may be such that it connects to the path on adjacent properties to provide a continuous route.
- 5.4-4 The Western States Trail through historic downtown is important as a historical asset and continues to provide circulation for equestrians, bicycles and pedestrians. This trail shall be preserved and incorporated into plans for enhancing circulation through Foresthill.
- 5.4-5 A bike and pedestrian path that connects Memorial Park to the Elementary School via Harrison and Church Streets and to the site for the proposed high school via Race Track Street should be constructed to provide safe circulation between these popular destinations.

Goal 5.5. Encourage public and alternative transportation to alleviate pollution and congestion.

Policies

- 5.5-1 Explore the possibility of expanding the transport of students to school to include the transport of the general public to the downtown district and to Auburn, possibly contracting out the transport to a private company.
- 5.5-2 New residential developments shall provide designated sites that can be used for transit stops, carpool lots and other centralized facilities.
- 5.5-3 New developments of 100 residential units or more shall provide public carpool parking facilities. These facilities should also be utilized for overflow parking and staging areas for community events.
- 5.5-4 Require developments of 100 residential units or more to provide sheltered public transit stops, with turnouts where appropriate. Consider development of turnouts in existing developed areas where roadway improvements are made or as deemed necessary for traffic flow and public safety.
- 5.5-5 Require that land use patterns and transportation systems in new growth areas be designed to provide residents and employees with the opportunity to accomplish many of their trips by walking, bicycling and using public transit.
- 5.5-6 Encourage opportunities in home-based businesses, telecommuting and local satellite offices, and more local employment opportunities as measures to reduce traffic. Investment in high-speed telephone, cable and satellite electronic transmission facilities should be encouraged, consistent with adopted design guidelines and land use limitations. Public education programs which focus on working from home also should be offered.

Goal 5.6. Maintain a balanced freight transportation system to provide for the safe and efficient movement of goods and services while minimizing impact on commute traffic.

Policies

- 5.6-1 If traffic signals become necessary on Foresthill Road, utilize control mechanisms that minimize the delay of through traffic, especially during non-commute hours.
- 5.6-2 Support Federal and State efforts to levy user charges which adequately mitigate truck traffic impacts to roadways and encourage a proportionate share to be returned for use on Divide roadways.

Goal 5.7. Provide emergency and public access to public lands.

Policies

- 5.7-1 New development projects which border public land shall provide emergency or public access to that public land utilizing existing roads or trails if possible. Access may be located along property lines. At least one access point shall be provided for each 5,000 feet of shared borders between private and public lands.

Goal 5.8. Reduce congestion at the intersection of Foresthill Road/Lincoln Way/I-80 Overcrossing intersection.

Policies

- 5.8-1 New development shall be evaluated as to its impact on the intersection.

Goal 5.9. Maintain a safe traffic speed in the Core Area.

Policies

- 5.9-1 The County shall explore and implement measures to control traffic speed on Foresthill Road in the Core Area, with the goal of maintaining the approved design speed in the area.

3.9.3 IMPACT EVALUATION CRITERIA

Appendix G of the *Guidelines for the Implementation of the California Environmental Quality Act* (CEQA Guidelines) provides that a project will normally have a significant effect on the environment if it will cause a substantial increase in traffic in relation to the existing traffic load and capacity of the street system. For this analysis, roadway Levels of Service will be used as the basis for determining significant impacts.

Potential significant impacts associated with traffic have been evaluated using the following specific criteria:

- The project would cause roadway or intersection operations to deteriorate to levels below LOS “C” on Foresthill Road between Auburn and the Idle Wheels Mobile Home Park, or LOS “D” between the Idle Wheels Mobile Home Park and east of the Foresthill Elementary School.
- If planned transit services do not meet the additional transit demand generated by the project, which includes helping the County meet its Level of Service standard, transportation systems management standards and air quality goals.
- If planned bicycle facilities do not provide adequate capacity for the additional bicycle trips generated by the project, and the policies and guidelines of the *Bikeway Master Plan*.

Two sources of potential evaluation criteria are available for the I-80 interchange analysis. Placer County’s Auburn/Bowman Plan (in which the interchange is located) sets forth goals and policies to guide the development of the area surrounding the four study intersections. Also included in that plan are policies regarding the operation of the road system within the plan area. Table 17 of the Community Plan document identifies Auburn Ravine Road at the I-80 overcrossing as having a minimum Level of Service standard of LOS “E”.

Caltrans has also established operational standards for the roadways under its jurisdiction. According to input received from Caltrans – District 3 staff, a significant impact is defined to occur if an intersection on the State highway system exceeds LOS “D”; this is a more conservative standard than has been set by Placer County.

For this analysis, the proposed FDCP would be considered to have a significant impact on traffic operations at the study intersections if it would:

- Change the Level of Service from acceptable levels (LOS “A,” “B,” “C,” or “D”) to unacceptable levels (LOS “E” or “F”); or

- Exacerbate conditions through an increase in the delay value at an intersection that already operates at LOS “E” or “F” under “no project” conditions.

As noted above, the evaluation criteria employed in this EIR reflect the Caltrans operational standard, which is more stringent than is required by Placer County policy.

3.9.4 IMPACTS AND MITIGATION MEASURES

Trip Generation

The amount of vehicular traffic that will be added to the Foresthill Divide street system was determined by estimating the number of vehicle trips associated with new development and assigning those trips to the area street system. Daily trip generation rates were derived from information presented in the Institute of Transportation Engineers publication *Trip Generation* (6th Edition), the Placer County model, consultation with Placer County staff, and existing traffic generation for the area. Table A in Appendix C details the source and derivation of trip generation rates utilized in this EIR.

Land use quantities were also obtained from Placer County staff and Quad Knopf. At buildout of the FDCP, a total of 5,415 dwelling units can be accommodated by the land use designations and zoning within the Plan area. However, based on consultation with County staff (based on historical buildout rates, Plan area topography and constraints associated with the use of onsite wastewater disposal systems), only 80% of that total (or 4,333 dwelling units) are anticipated to exist in the Plan area at buildout. This equates to 2,380 new dwelling units. An additional 165.5 acres of non-residential uses (70.5 acres of industrial, 60.0 acres of business park, and 35 acres of retail) and a 400-student high school comprise the new non-residential development portion of the FDCP. Table 3.9-6 displays these future land uses.

Table 3.9-6
Trip Generation Analysis

Land Use	Quantity	Units	Daily Rate	Daily Trips Generated
<i>Future Land Use</i>				
Single Family Residential	2,208 du	du's	5.54 trips/du	12,232
Multi-Family Residential	172 du	du's	3.99 trips/du	686
Subtotal Residential	2,380 du			12,918
Retail Pass-by (20%) New Retail Trips	35.0 ac	acre	145 trips/acre	5,075 <1,015> 4,060
Business/Professional	60.0 ac	acre	20 trips/acre	1,200
Industrial	70.5 ac	acre	35 trips/acre	2,468
High School	400 students	student	1.79 trips/student	716
Subtotal Non-Residential				8,444

Land Use	Quantity	Units	Daily Rate	Daily Trips Generated
100% Match				8,444
“Net” Residential Trips				4,474
Total External Trips				4,474

Source: kdAnderson Transportation Engineers, 2002

As shown in Table 3.9-6, a total of 12,918 daily trips are anticipated to be generated from the residential portion of the new development within the Plan area, while a total of 8,444 “new” daily trips are anticipated from the non-residential portion of the new development within the Plan area.

Based on the characteristics of the Plan area, discussions with Placer County staff, and the future land uses, it was assumed that 100% of the “new” non-residential trips would be matched by the “new” residential trips within the Plan area. Accounting for the internal matching, a total of 4,474 external trips result due to an imbalance of residential and non-residential uses.

This section also documents the effects of adding the traffic associated with full implementation of the FDCP to existing traffic volumes at the four study intersections in the I-80 interchange analysis. It assumes that no improvements will have been made at those locations. To evaluate these impacts, the volume of traffic generated by implementation of the FDCP was estimated, and that traffic was assigned to the adjacent street system. The Levels of Service at the study intersections were then analyzed for the PM peak hour.

The PM peak-hour trip generation associated with the FDCP at the Auburn Ravine/I-80 interchange land uses was estimated based on daily traffic information presented above. The daily traffic volumes were converted to PM peak hour figures using traffic count data provided by the Placer County Department of Public Works, as described below.

According to Table 3.9-6, implementation of the proposed FDCP land uses will generate a net total of 4,474 external trips on a daily basis. For the purposes of this analysis, it was assumed that all of these trips would use Foresthill Road to travel to and from I-80 and the Auburn area. This assumption provides a conservative indication of the effects of the proposed FDCP on the study intersections.

The Placer County Department of Public Works performed weekday traffic counts on Foresthill Road between Tuesday, January 21, 2003 and Thursday, January 23, 2003. According to those counts, the PM peak hour traffic volume varied from 8.5 percent to 9.2 percent of the total daily traffic. Using the highest value (to ensure a conservative analysis of PM peak hour conditions), the PM peak hour traffic volume associated with implementation of the FDCP land uses was estimated to be approximately 415 vehicles per hour (VPH).

The County's traffic data further indicated that about 75 percent of the PM peak hour traffic on Foresthill Road is eastbound, with the remaining 25 percent being westbound. Thus, in the PM peak hour, approximately 310 additional eastbound trips will be generated by full implementation of the proposed FDCP, in combination with 105 additional westbound trips.

Table 3.9-7 summarizes the derivation of the PM peak hour traffic estimates.

Table 3.9-7
PM Peak Hour Trip Generation Estimates

Community Plan-Generated Daily Trips ¹	4,474 Vehicles Per Day
PM Peak Hour Trips (9.2% of Daily Traffic) ²	415 Vehicles Per Hour
Eastbound (75% of PM Peak Hour) ²	310 Vehicles Per Hour
Westbound (25% of PM Peak Hour) ²	105 Vehicles Per Hour
Notes: ¹ Reference: kdAnderson Transportation Engineers, <i>Foresthill Community Plan DEIR Transportation and Circulation Element</i> , April 8, 2003. ² Reference: Placer County Department of Public Works, Traffic counts conducted January 21-23, 2003.	

Trip Distribution

The study area trip distribution was based on existing travel patterns and the distribution of the existing and future development in the Plan area. New external trips were distributed onto the surrounding roadway system. For commercial uses, 20% of the trips were considered to be pass-by trips, as previously mentioned. These pass-by trips were attracted from the traffic passing the site on the adjacent street system. Figure 3.9-4 displays the resulting daily traffic volumes on the study area roadways.

The directional distribution of the FDCP generated traffic at the study intersections for the I-80 interchange analysis was based primarily on existing traffic patterns in the vicinity of the interchange. Figure 3.9-5 illustrates the anticipated distribution of FDCP-generated trips.

Impact Analysis

The resulting future projections on the study roadways are presented in Table 3.9-8. These future daily traffic projections were compared to the Level of Service criteria that was previously developed for the study area roadways. As shown in Table 3.9-8, all of the study area roadways are projected to operate at LOS "C" or better, with the exception of two sections of Foresthill Road, which are projected to operate at LOS "D" between the Foresthill Bridge and Drivers Flat Road and between Drivers Flat Road and Spring Garden Road.

Projected daily roadway volumes were compared to the daily traffic warrants contained in the Traffic Manual to determine if traffic signals would eventually be needed at any of the intersections within the Plan area. Based on these daily volumes, three (3) intersections are projected to meet warrants for signalization. These three (3) intersections include:

1. Foresthill Road/McKeon-Ponderosa Road
2. Foresthill Road/Todd Valley Road (West)
3. Foresthill Road/Power Line Road

The PM peak-hour traffic volumes generated by the proposed FDCP at the Auburn Ravine/I-80 interchange are illustrated on Figure 3.9-6. Those trips were added to the existing traffic volumes, with the result being the “Existing + Project” conditions as shown on Figure 3.9-7, which also illustrates the study intersection lane configurations. Appendix C contains the technical calculation worksheets.

Addition of the Plan-generated traffic results in no change in Level of Service at three of the study intersections. The intersections of Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp and Auburn Ravine Road/I-80 Westbound Off-ramp will continue to operate at LOS “B,” and the intersection of Auburn Ravine Road/I-80 Eastbound Ramps will continue to operated at LOS “D.” Only the intersection of Auburn Ravine Road/Foresthill Road/Lincoln Way will have a different Level of Service, declining from LOS “C” to LOS “D.”

Transit Service

When the Plan area fully develops, the need for an additional bus or change in bus routes may occur. Because of the long-range nature of development, a transit study should be conducted in the long term to determine future needs. Community Plan Policy 5.5-4 requires developments of 100 residential units or more to provide sheltered public transit stops, with turnouts where appropriate. Development of turnouts in existing developed areas where roadway improvements are made should also be considered, as deemed necessary for traffic flow and public safety.

Table 3.9-8
Future Daily Roadway Traffic Volumes and Levels of Service

Roadway	Location	Criteria	LOS C Threshold	Daily Traffic	LOS
Foresthill Road	Foresthill Bridge to Drivers Flat Rd	Rural w/39% climbing	10,710	11,400	D
Foresthill Road	Drivers Flat Rd to Spring Garden Rd	Rural w/40% climbing	10,880	11,700	D
Foresthill Road	Spring Garden Rd to Todd Valley Rd	Rural w/71% climbing	18,540	9,900	C
Foresthill Road	Todd Valley (w) to Idle Wheels Mobile Home Park	Rural w/43% climbing	11,450	10,200	C
Foresthill Road	Idle Wheels Mobile Home Park to Mosquito Ridge Rd	Arterial	12,000	10,800	C
Foresthill Road	Mosquito Ridge Rd to Yankee Jim’s Rd	Arterial	12,000	9,100	B
Foresthill Road	Yankee Jim’s Rd to Blackhawk Lane	Arterial	12,000	6,300	A

Roadway	Location	Criteria	LOS C Threshold	Daily Traffic	LOS
Foresthill Road	Black Hawk Lane to Ebberts Ranch Rd	Arterial	12,000	3,050	A
Foresthill Road	Ebberts Ranch Rd to Michigan Bluff Rd	Arterial	12,000	1,450	A
Foresthill Road	Ebberts Ranch Rd. to Michigan Bluff Rd	Arterial	12,000	1,100	A
McKeon-Ponderosa Rd.	S. of Foresthill Rd	Rural w/out passing	6,400	1,700	B
Spring Garden Rd.	N. of Foresthill Rd	Rural-Mountainous	4,200	1,050	B
Happy Pines Dr.	S. of Foresthill Rd	Rural w/out passing	6,400	1,450	B
Todd Valley Rd. (W)	S. of Foresthill Rd	Rural w/out passing	6,400	3,100	B
Todd Valley Rd. (E)	S. of Foresthill Rd	Rural w/out passing	6,400	500	A
Mosquito Ridge Rd.	S. of Foresthill Rd	Rural-Mountainous	4,200	1,350	B
Yankee Jim's Rd.	N. of Race Track St	Rural-Mountainous	4,200	1,550	B
Main Street	S. of Foresthill Rd	Arterial	12,000	900	A
Michigan Bluff Rd.	S. of Foresthill Rd	Rural w/out passing	6,400	400	A
Race Track St.	N. of Foresthill Rd	Arterial	12,000	1,350	A
Todd Valley Connection	Between Todd Valley and Foresthill	Rural w/out passing	6,400	900	A
Spring Garden Connection (Power Line Rd)	E. of Spring Garden Rd	Rural-Mountainous	4,200	150	A
Spring Garden Connection (Power Line Rd)	N. of Foresthill Rd adjacent to high school	Arterial	12,000	1,850	A

Source: kdAnderson Transportation Engineers, 2003.

Table 3.9-9
Level of Service Summary
Existing + Project Conditions

Intersection	Traffic Control	PM Peak Hour			
		Existing Conditions		Existing + Project	
		Delay¹	LOS²	Delay	LOS
Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp	Signal	19.2	B	19.5	B
Auburn Ravine Road/I-80 Westbound Off-ramp	Signal	10.3	B	10.3	B
Auburn Ravine Road/I-80 Eastbound Ramps	Signal	36.8	D	49.2	D
Auburn Ravine Road/Foresthill Road/Lincoln Way	Signal	30.4	C	41.7	D
Notes:					
¹ Average control delay (seconds per vehicle)					
² Level of Service					

Source: Martin Rivett & Olson, 2003.

Park and Ride Lot

The Foresthill community currently has one designated park and ride lot. Installation of additional park and ride lots would provide motorists wishing to ride share and/or ride transit central places to meet and leave their vehicles. Additional park and ride lots would potentially increase ridesharing. Such lot(s) should be centrally located to be serviced by transit. Policy 5.5-3 states that new developments of 100 residential units or more shall provide public carpool parking facilities. These facilities should also be utilized for overflow parking and staging areas for community events.

Bikeway/Pedestrians

With development of the Plan area, the need for both bikeway and pedestrian facilities will increase. Sidewalks and/or pedestrian trails should be constructed as part of the frontage improvements for all developments. In addition, a bikeway master plan and trail master plan should be developed for the Plan area and incorporated in the Placer County Trails Master Plan and the Placer County Regional Bikeway Plan. The Community Plan includes policies relating to bicycle and pedestrian facilities which are listed above.

3.9-1 Increased traffic throughout the Community Plan area due to development in accordance with the FDCP.

Selected portions of the circulation system do not have enough available capacity to accommodate the proposed level of development. With buildout of the Foresthill Divide Community Plan as proposed, the resulting Level of Service on Foresthill Road will be LOS “D” on the segments between the Foresthill Bridge and Drivers Flat Road and between Drivers Flat Road and Spring Garden Road. Community Plan Policy 5.1-1 requires LOS “C” operations to be maintained on Foresthill Road between Auburn and the Idle Wheels Mobile Home Park; therefore, this is considered a *significant impact*. Level of Service “D” on a Class I highway results in motorists spending 65 to 80 percent of their time following other vehicles, which is an increase from the LOS “C” threshold of 50 to 65 percent. This additional time spent following other motorists results in a decrease in average travel speeds from 45 to 50 miles per hour at LOS “C” to 40 to 45 miles per hour for LOS “D” operations.

Reduction of the overall amount of development within the Plan area would be required unless the County is willing to accept LOS “D” operations on additional sections of Foresthill Road. A reduction in the number of new housing units would reduce the amount of external traffic leaving the area on Foresthill Road, which in turn would reduce future daily traffic projections on this roadway. Based on daily capacity thresholds, reduction of approximately 800 daily trips on Foresthill Road is needed in order to achieve the LOS “C” policy. It should be noted that each dwelling unit is projected to generate 5.54 daily trips, of which 95% of those trips that do not match within the Plan area are anticipated to travel between Auburn and Foresthill. Therefore, development of 160 fewer dwelling units would result in approximately 850 fewer daily trips on Foresthill Road between Auburn and Foresthill. This reduction in residential development would yield LOS “C” operations on the two segments of Foresthill Road that are projected to operate at LOS “D” under the proposed FDCP.

The County has concluded that, because those 160 units represent less than 7 percent of the new housing units that would be accommodated by the FDCP (and less than 4 percent of total housing units in the Plan area), based on historical growth rates and topographic constraints it is unlikely that construction of the last 160 units would occur within the planning period (or before the new FDCP is updated). This impact is therefore considered *potentially significant*, but can be mitigated to a level that is less than significant.

Further, the County has reviewed the feasibility of adding additional passing lanes on Foresthill Road to increase the capacity and provide LOS “C” operations. Increasing the passing lane percentage from 39 percent to 43 percent would eliminate the LOS “D” operations on the 5.6 mile segment of Foresthill Road between the Foresthill Bridge and Drivers Flat Road. In order to achieve 43 percent passing lanes in this uphill section of Foresthill Road, an additional 0.22 mile of passing lanes (a 4 percent increase) would be required. On the segment of Foresthill Road between Drivers Flat Road and Spring Garden Road, a total of 45 percent passing lanes would be needed on this uphill section to achieve LOS “C” operations. This 5 percent increase in passing lanes would equate to an additional 0.24 mile of passing lane on this 4.84 mile segment. Based on field observations, the County has concluded that adding another 4 to 5 percent passing lanes on Foresthill Road between the Foresthill Bridge and Drivers Flat Road, and between Drivers Flat Road and Spring Garden Road would be economically feasible with reasonable traffic impact mitigation fees.

Mitigation Measure

Implementation of the following mitigation measure will reduce impacts to a *less than significant level*:

- 3.9-1a *Traffic mitigation fees shall be adopted for new development in the Plan area that are sufficient to fund roadway improvements necessary to maintain the Level of Service established by the FDCP, including new roadway segments and additional passing lanes on Foresthill Road.*

The following additional measures will improve traffic flow on Foresthill Road. They will not improve the Level of Service; however, they are needed due to traffic volumes.

- 3.9-1b *A center two-way left turn on Foresthill Road from the Todd’s Valley area through the Core Area shall be installed, as it will improve traffic flow during peak periods. This center two-way left turn will improve safety by providing left turning motorists a refuge area to wait for the next available gap out of the through traffic flow on Foresthill Road, thus allowing through traffic to continue its progression.*
- 3.9-1c *At such time as they are warranted, traffic signals shall be installed on Foresthill Road at the following locations:*
- *Spring Garden Road*
 - *Todd Valley Road (W)*
 - *Spring Garden Connection (Power Line Road)*

Signal control mechanisms that minimize the delay of through traffic should be utilized, especially during non-commute hours. Roundabouts are an alternative to signalization, and often minimize traffic delays resulting from signalization. However, a detailed roundabout analysis has not been performed, and not all intersections are good candidates for roundabouts.

3.9-2 Potential decrease in Level of Service at key intersections at the I-80/Auburn Ravine Road/Foresthill Road interchange due to increased traffic in the Community Plan area.

As presented in Table 3.9-9, addition of Plan-generated traffic results in no change in the Level of Service at three of the four interchange study intersections. The intersections of Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp and Auburn Ravine Road/I-80 Westbound Off-ramp will continue to operate at LOS “B”, and the intersection of Auburn Ravine Road/I-80 Eastbound Ramps will continue to operate at LOS “D”. Only the intersection of Auburn Ravine Road/Foresthill Road/Lincoln Way will have a different Level of Service, declining from LOS “C” to LOS “D”.

Thus, with the addition of the Community Plan-generated traffic, all of the study intersections will operate within the LOS “D” standard used in this EIR, and this impact will be *less than significant*.

Mitigation Measure

No mitigation measures are required.

CUMULATIVE CONDITIONS ANALYSIS OF I-80 INTERCHANGE

This section describes the results of the analysis of the I-80 interchange study area traffic operations under cumulative conditions in the PM peak hour. Specifically, this analysis reflects the level of development anticipated in Placer County through the year 2020. Analyses are presented for two scenarios: (1) Cumulative No Project conditions, which reflects the level of development and related traffic volumes associated with the current, adopted Foresthill Divide General Plan, and (2) Cumulative + Project conditions, reflecting the traffic generated by the proposed Community Plan land uses.

Cumulative No Project Conditions

Traffic volumes for Cumulative No Project conditions were estimated based on future traffic volume estimates provided by Placer County Department of Public Works staff. County staff used the General Plan Travel Demand Model to develop traffic estimates for two time frames: (1) base year (i.e., existing) and (2) the year 2020. The mathematical difference between these two sets of traffic forecasts represents the estimated level of traffic growth through the year 2020. That incremental difference was added to the existing traffic volumes described earlier to develop the Cumulative No Project traffic volumes. Note that these volumes include the traffic

associated with the current, adopted version of the Foresthill General Plan, as that level of development has previously been approved.

Figure 3.9-8 illustrates the Cumulative No Project PM peak hour traffic volumes developed using this process.

Planned Roadway Improvements

Consultation with Placer County staff identified the following roadway improvements that will be constructed at the study intersections prior to the year 2020:

- Widening of the I-80/Auburn Ravine Road overcrossing to four lanes – This \$2,243,000 improvement is listed in the *Placer County Regional Transportation Plan – 2022* (Placer County Transportation Planning Agency, December 2001), and is planned to occur by 2010;
- A new eastbound right-turn lane at Auburn Ravine Road/Lincoln Way (i.e., conversion of a combined through/right-turn lane to separate through and right-turn lanes); and
- Dual northbound left-turn lanes on Lincoln Way at Auburn Ravine Road.

Figure 3.9-8 shows the modified lane configurations at the study intersections resulting from implementation of these planned improvements.

Intersection Level of Service

In the PM peak hour, LOS “B” is projected at the intersections of Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp and Auburn Ravine Road/I-80 Westbound Off-ramp. The intersections of Auburn Ravine Road/I-80 Eastbound Ramps and Auburn Ravine Road/Foresthill Road/Lincoln Way are both expected to operate at LOS “D”. Thus, implementation of the current, adopted Foresthill General Plan, combined with the roadway improvements described above, will result in acceptable operations at all four study intersections under Cumulative No Project conditions.

Table 3.9-10 summarizes the intersection Level of Service results for Cumulative No Project conditions. The calculation worksheets are presented in Appendix C.

Table 3.9-10
Level of Service Summary
Cumulative No Project Conditions

Intersection	Traffic Control	PM Peak Hour	
		Delay ¹	LOS ²
Auburn Ravine Road/Bowman Road/I-80 Westbound On-ramp	Signal	16.7	B
Auburn Ravine Road/I-80 Westbound Off-ramp	Signal	12.1	B

Intersection	Traffic Control	PM Peak Hour	
		Delay ¹	LOS ²
Auburn Ravine Road/I-80 Eastbound Ramps	Signal	36.4	D
Auburn Ravine Road/Foresthill Road/Lincoln Way	Signal	54.1	D
Notes: ¹ Average control delay (seconds per vehicle) ² Level of Service			

Source: Martin Rivett & Olson, 2003.

Cumulative + Project Conditions

3.9-3 Potential decrease in Level of Service at key intersections at the I-80/Auburn Ravine Road/Foresthill Road interchange due to increased traffic in the Community Plan under Cumulative + Project conditions.

The Cumulative + Project conditions PM peak hour traffic volumes were developed based on daily traffic information presented in the Foresthill Community Plan DEIR Transportation and Circulation Element. The daily traffic volumes were converted to PM peak hour figures using traffic count data provided by the Placer County Department of Public Works.

As presented earlier in this section, Foresthill Road (east of the Foresthill Bridge) currently carries approximately 6,650 vehicles per day (VPD). With full implementation of the proposed FDCP land uses, the daily traffic volume at that location is estimated to be 11,400 VPD, indicating a net increase of 4,750 VPD. This total includes the 4,474 VPD directly associated with implementation of the proposed FDCP, as well as a reasonable amount of non-Plan-generated traffic growth. Specifically, according to representatives of the Placer County Department of Public Works, these non-Plan-generated trips (approximately 275 trips per day) will be recreational in nature, consisting of hikers and others taking advantage of the natural beauty of the area.

Assuming, as described earlier, that 9.2 percent of the daily traffic will occur in the PM peak hour, this daily traffic volume increase translates to 440 PM peak hour trips. As noted earlier, the County's traffic data showed that about 75 percent of the PM peak hour traffic is eastbound and 25 percent is westbound. Thus, approximately 330 additional eastbound trips and 110 additional westbound trips will be generated by full implementation of the proposed Community Plan (combined with non-Plan-related traffic growth) under cumulative conditions.

The Cumulative + Project traffic volumes were assigned to the study intersections using a trip distribution derived from the Cumulative No Project traffic patterns. Because traffic patterns in the vicinity of the I-80/Auburn Ravine Road interchange are expected to change somewhat between now and the year 2020, the distribution of Plan-generated trips is expected to be slightly different than was used in the Existing + Project analysis. The cumulative conditions trip distribution is shown on Figure 3.9-9. Figure 3.9-10 illustrates the Cumulative + Project traffic volume estimates resulting from assignment of the proposed Plan-generated traffic using this distribution.

Intersection Level of Service

Table 3.9-11 presents the results of the intersection Level of Service analysis for the Cumulative + Project scenario. Appendix C contains the calculation worksheets.

The two westernmost study intersections are expected to remain at LOS “B” under Cumulative + Project conditions. The intersection of Auburn Ravine Road/I-80 Eastbound Ramps is projected to operate at a better Level of Service under this scenario; it will operate at LOS “C” compared to LOS “D” under Cumulative No Project conditions. At the intersection of Auburn Ravine Road/Foresthill Road/Lincoln Way, the Plan-generated traffic results in no change in LOS compared to Cumulative No Project conditions; it is projected to operate at LOS “D” under both scenarios.

Thus, the four study locations will meet the LOS “D” standard established for this study, and no significant traffic impacts on the I-80 interchange will result from implementation of the proposed Foresthill Divide Community Plan. As noted earlier, the LOS “D” standard used in this analysis is more stringent than has been defined by Placer County. This impact is therefore *less than significant*.

Table 3.9-II
Level of Service Summary
Cumulative + Project Conditions

Intersection	Traffic Control	PM Peak Hour			
		Cumulative No Project		Cumulative + Project	
		Delay ¹	LOS ²	Delay	LOS
Auburn Ravine Road/Bowman Road/ I-80 Westbound On-ramp	Signal	16.7	B	18.0	B
Auburn Ravine Road/I-80 Westbound Off-ramp	Signal	12.1	B	12.2	B
Auburn Ravine Road/I-80 Eastbound Ramps	Signal	36.4	D	31.2	C
Auburn Ravine Road/Foresthill Road/Lincoln Way	Signal	54.1	D	50.0	D
Notes:					
¹ Average control delay (seconds per vehicle)					
² Level of Service					

Source: Martin Rivett & Olson, 2003.

Mitigation Measure

The Cumulative Conditions analysis revealed that all four study intersections are expected to operate at LOS “D” or better under Cumulative + Project conditions. Therefore, no mitigation measures are required.

3.10 NOISE

3.10.1 INTRODUCTION

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers for many years have grappled with the problem of translating objective measurements of sound into directly correlated measures of public reaction to noise. The descriptors of community noise in current use are the results of these efforts, and represent simplified, practical measurement tools to gauge community response. Figure 3.10-1 provides examples of maximum or continuous noise levels associated with common noise sources. For an explanation of terms used in this section, see Appendix D of this EIR.

A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which is the sound level corresponding to a steady-state A-weighted sound level in decibels (dB) containing the same total energy as a time-varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, and shows very good correlation with community response to noise.

Two composite noise descriptors are in common use today: L_{dn} and CNEL. The L_{dn} (Day-Night Average Level) is based upon the average hourly L_{eq} over a 24-hour day, with a +10 decibel weighting applied to nighttime (10:00 p.m. to 7:00 a.m.) L_{eq} values. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were subjectively twice as loud as daytime exposures. The CNEL (Community Noise Equivalent Level), like L_{dn} , is based upon the weighted average hourly L_{eq} over a 24-hour day, except that an additional +4.77 decibel penalty is applied to evening (7:00 p.m. to 10:00 p.m.) hourly L_{eq} values. Measured L_{dn} and CNEL values are generally within 1 dB of one another. The CNEL was developed for the California Airport Noise Regulations, and is normally applied to airport/aircraft noise assessment. The L_{dn} descriptor is a simplification of the CNEL concept, but the two will usually agree, for a given situation, within 1 dB. Like the L_{eq} , these descriptors are also averages and tend to disguise short-term variations in the noise environment. Because they presume increased evening or nighttime sensitivity, these descriptors are best applied as criteria for land uses where nighttime noise exposures are critical to the acceptability of the noise environment, such as residential developments.

The State Office of Planning and Research Noise Element Guidelines require that major noise sources be identified and quantified by preparing generalized noise contours for current and projected conditions. Significant noise sources include traffic on major roadways and highways, and representative industrial activities and fixed noise sources.

Noise modeling techniques and noise measurements were used to develop generalized L_{dn} /CNEL or L_{eq} noise contours for the major roadways and fixed noise sources in the Foresthill Divide Community Plan area for existing conditions.

Modeling methods have been developed for a number of environmental noise sources, including roadways, railroad line operations, railroad yard operations and industrial plants. Such methods

produce reliable results as long as data inputs and assumptions are valid. The modeling methods used in this EIR closely follow recommendations made by the State Office of Noise Control, and were supplemented where appropriate by field-measured noise level data to account for local conditions. The noise exposure contours are based upon annual average conditions. Because local topography, vegetation or intervening structures may significantly affect noise exposure at a particular location, the noise contours should not be considered site-specific.

3.10.2 SETTING

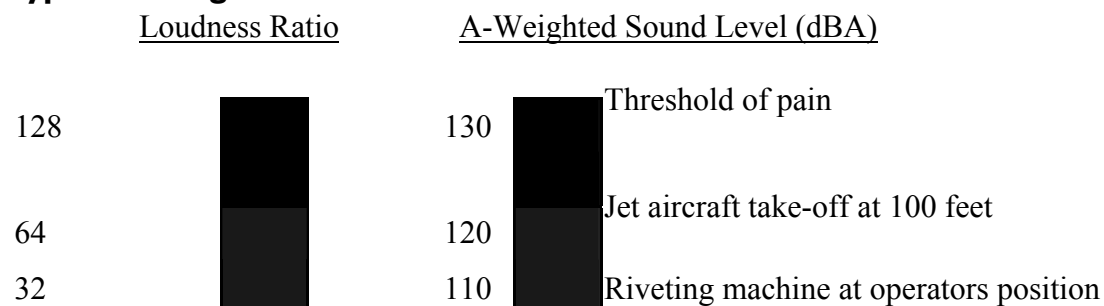
NOISE LEVEL STANDARDS

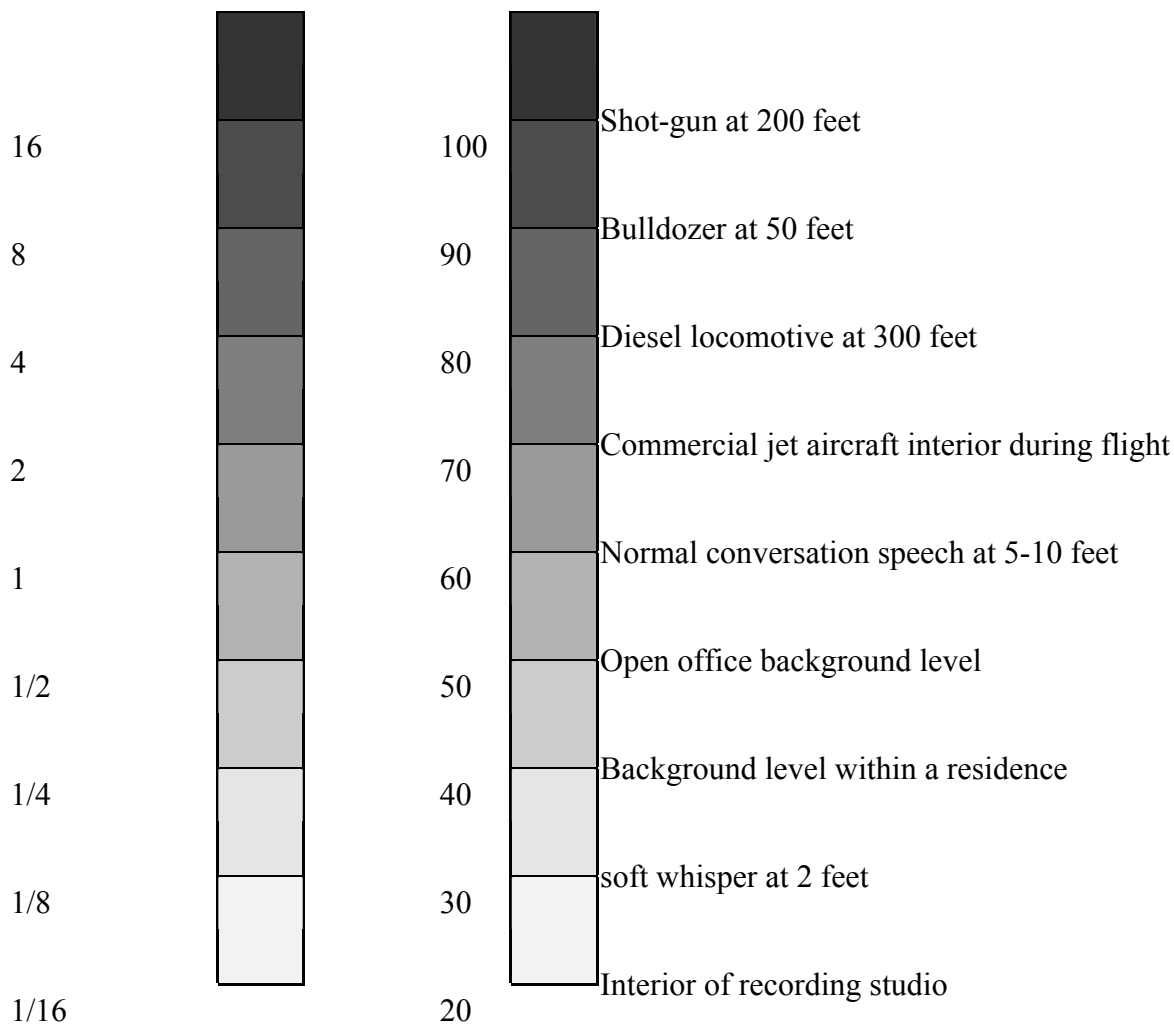
The FDCP does not include goals and policies related to noise; the goals and policies of the Placer County General Plan apply within the Plan area. The Placer County General Plan Noise Element policies pertaining to noise are designed to protect county residents from the harmful and annoying effects of exposure to excessive noise. Policies applicable to the proposed FDCP are presented below:

- The County shall not allow development of new noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table [3.10-1] as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 3.10-1 (Table 9-1 of the Placer County General Plan Noise Element).
- The County shall require that noise created by new non-transportation noise sources be mitigated so as not to exceed the noise level standards of Table 3.10-1 as measured immediately within the property line of lands designated for noise- sensitive uses.
- Impulsive noise produced by blasting should not be subject to the criteria listed in Table 3.10-1. Single event impulsive noise levels produced by gunshots or blasting shall not exceed a peak linear overpressure of 122 dB, or a C-weighted Sound Exposure Level (SEL) of 98 dBC. The cumulative noise level from impulsive sounds such as gunshots and blasting shall not exceed 60 dB LCDN or CNEL-C on any given day. These standards shall be applied at the property line of a receiving land use.

Figure 3.10-1

Typical A-Weighted Sound Levels of Common Noise Sources





Source: Bollard & Brennan, Inc., 2000.

- The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 3.10-2 (Table 9-3 of the Placer County General Plan Noise Element).
- Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 3.10-2 at the outdoor activity areas or interior spaces of existing noise-sensitive land uses.
- The County shall implement one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:
 - a) Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;
 - b) Lowering speed limits, if feasible and practical;

- c) Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;
- d) Acoustical treatment of buildings; or
- e) Construction of noise barriers.

Table 3.10-1

**Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources
(from Table 9-I of the Placer County General Plan)**

Zone District of Receptor	Property Line of Receiving Use	Interior Spaces
Residential Adjacent to Industrial	60 dBA	45 dBA
Other Residential	50 dBA	45 dBA
Office/Professional	70 dBA	45 dBA
Neighborhood Commercial	70dBA	45 dBA

Notes for Table 3.10-1:

1. Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
2. Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

Source: 1994 Placer County General Plan.

Table 3.10-2

**Maximum Allowable Noise Exposure (L_{dn}) Transportation Noise Sources
(from Table 9-3 of the Placer County General Plan)**

	Outdoor Activity Areas (a)	Interior Spaces	
Land Use	L_{dn} / CNEL,dB	L_{dn} / CNEL, dB	L_{eq} , dB (b)
Residential	60 (c)	45	---
Transient Lodging	60 (c)	45	---
Hospitals, Nursing Homes	60 (c)	45	---
Theaters, Auditoriums	---	---	---
Churches, Meeting Halls	60 (c)	---	35
Office Buildings	---	---	40
Schools, Libraries, Museums	---	---	45

- (a) Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
- (b) As determined for a typical worst-case hour during periods of use.
- (c) Where it is not possible to reduce noise in outdoor activity areas to 60 L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: 1994 Placer County General Plan

- Where noise mitigation measures are required to achieve the standards of Tables 3.10-1 and 3.10-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been incorporated into the project.

AMBIENT NOISE ENVIRONMENT

Existing Roadway Noise

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD_77_108) was used to develop L_{dn} contours for all major roadways. The FHWA Model is the analytical method presently favored for traffic noise prediction by most state and local agencies, including Caltrans. The current version of the model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour day and to adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Traffic data representing annual average traffic volumes for existing conditions (Year 2000) were obtained from kdAnderson Transportation Engineers. Using the FHWA methodology, traffic noise levels as defined by L_{dn} were calculated for existing traffic volumes. Appendix E contains the Highway Traffic Noise Prediction Model Input Data. Distances from the centerlines of selected roadways to the existing 55 dB, 60 dB, and 65 dB L_{dn} contours are summarized in Table 3.10-3.

In some cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. Therefore, the distances reported in Table 3.10-3 are estimates of noise exposure along roadways in the Foresthill Divide Community Plan area.

The effects of factors such as roadway curvature, grade, etc. can be determined from site-specific traffic noise measurements. The noise measurement results can be compared to the FHWA model results by entering the observed traffic volumes, speed and distance as inputs to the FHWA model. The differences between the measured and predicted noise levels can be used to adjust the FHWA model and more precisely determine the locations of the traffic noise contours.

Truck traffic heading downhill can affect the noise environment, primarily maximum noise levels due to the use of jake brakes. However, based on the number of trucks which actually use jake brakes compared to overall traffic volumes and numbers of trucks, the computed 24-hour L_{dn} value will not change.

Table 3.10-4 has been prepared to serve as a guide when applying the traffic noise exposure contour information presented in this section to areas with varying topography. The table is used by adding the correction factor to the noise level predicted at a given distance. It should be noted that the adjustment factors presented in this table are intended to provide conservative (worst-case) results, and that complex situations should be evaluated by an acoustical consultant where the potential for significant noise impact exists.

Table 3.10-3

Existing (2000) Noise Contour Data Distance (Feet) from Center of Roadway to L_{dn} Contours

Segment	Description	Existing		
		55 dB	60 dB	65 dB
Yankee Jim's Road				
1	North of Race Track Road	15	7	3
Foresthill Road				
2	East of Foresthill Bridge	371	172	80
3	South of Lutheran Church	234	109	50
4	South of Michigan Bluff Road	66	31	14
5	North of Michigan Bluff Road	47	22	10
6	North of Happy Pines Road	221	103	48
Main Street				
7	East of Foresthill Road	26	12	6
McKeon-Ponderosa Way				
8	South of Foresthill Road	62	29	13
Michigan Bluff Road				
9	East of Foresthill Road	16	8	3
Race Track Road				
10	North of Foresthill Road	44	20	10
Todd Valley Road				
11	Northeast of Foresthill Road	22	10	5
12	Southeast of Foresthill Road	91	42	20
Happy Pines Road				
13	East of Foresthill Road	56	26	12
Mosquito Ridge Road				
14	East of Foresthill Road	18	8	4
Spring Garden Road				
15	West of Foresthill Road	35	16	7

Source: Bollard & Brennan, Inc., 2002.

**Table 3.10-4
Traffic Noise Adjustments for Various Topographic Conditions**

Topographic Situation	Distance from Center of Roadway (Feet)		
	<200	200 - 400	>400
Hillside overlooks roadway	-0-	+1 dB	+3 dB
Roadway Elevated (>15')	-5 dB	-2 dB	-0-
Roadway in cut/below embankment	-5 dB	-5 dB	-5 dB
Dense vegetation (100 feet or more)	-5 dB	-5 dB	-5 dB

Source: Bollard & Brennan, Inc., 2002.

Aircraft

The Plan area is not served by a public/commercial airport. The closest airports to Foresthill are the Georgetown Airport and Auburn Municipal Airport.

Fixed Noise Sources

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which may be annoying to individuals who live in the nearby vicinity. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day and existing ambient noise levels.

From a land use planning perspective, fixed-source noise control issues focus upon two goals: to prevent the introduction of new noise-producing uses in noise-sensitive areas, and to prevent encroachment of noise sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise level performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in near proximity to noise-producing facilities include mitigation measures to ensure compliance with noise performance standards.

The types of uses which may typically be characterized as stationary or fixed noise sources include but are not limited to: industrial facilities including lumber mills, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

Field observations within the Plan area identified three potential fixed noise sources. These included the Auburn State Recreation Area Off-Highway Vehicle Park, the Transfer Station

which is located off of Todd Valley Road, and the shooting range which is located off of Yankee Jim's Road. A brief description has been provided for each of the three identified noise sources.

Auburn State Recreation Area Off-Highway Vehicle (OHV) Park. The Auburn State Recreation Area OHV Park is located in the southeast portion of the Plan area, and is generally in the area of Lake Clementine Road and the Auburn Foresthill Road. A detailed analysis of noise impacts was prepared for this site in 1996 by Brown-Buntin Associates, Inc. (*Environmental Noise Analysis, Mammoth Bar OHV Park Expansion*, BBA, 12-11-96.)

In general, the OHV Park is located in a remote area bounded by the North and Middle Forks of the American River. Primarily motorcycles in the range of 50 cc to 500 cc in size operate in this area. Maximum noise levels due to these types of motorcycles can range between 70 dB and 90 dB at a distance of 100 feet, depending on the motorcycle, size of the engine, modifications which may have been made to the bike, and the number of vehicles operating in a given area at the same time.

Transfer Station. The Transfer Station is located south of Foresthill near Todd Valley Road, at the end of Patent Road. Transfer stations generally contain tipping areas for garbage, material recovery facilities (MRF) and recycling areas. Noise levels attributed to transfer stations are primarily due to truck traffic to and from the site. Other equipment such as fork lifts and front-end loaders also operate on these sites. In some cases portable tub grinders which are used for chipping wood waste are also located on these sites. Generally, if residences are located within 300 feet of these facilities, noise levels can exceed locally acceptable noise level criteria.

Shooting Range. A local shooting range is located on Yankee Jim's Road, north of Spring Garden Road. No individuals were at the shooting range during the field investigations. Noise generated by firearms usage consists of bursts of high-energy impulsive sound. This differs from sound generated by common community noise sources. Noise level data collected for other small arms firing ranges indicate that maximum A-weighted noise levels range between 89 dB for a 9mm handgun to 97 dB for an AR-15 rifle at a distance of 100 feet. Maximum noise levels due to multiple handguns and rifles firing simultaneously have been measured to be approximately 102 dB at a distance of 100 feet.

Community Noise Survey

A community noise survey was conducted to document noise exposure in areas of the Plan area which are away from the major roadways.

Short-term noise monitoring was conducted at four sites on June 8 and 9, 2000. Each site was monitored during the day and night so that estimates of L_{dn} could be prepared. Two continuous hourly noise monitoring sites were established in the Plan area to record day-night statistical noise level trends. The data collected included the L_{eq} , the maximum level during the measurement period (L_{max}), and other statistical descriptors. Noise monitoring sites, measured noise levels, and estimated L_{dn} values at each site are summarized in Table 3.10-5. Figure 3.10-2 shows the noise measurement locations.

Community noise monitoring systems were calibrated with acoustical calibrators in the field prior to use. The systems comply with all pertinent requirements of the American National Standards Institute (ANSI) for Type I sound level meters.

The community noise survey results indicate that typical noise levels in noise sensitive areas of the Plan area are in the range of 41.3 dB to 46.6 dB L_{dn} . Traffic on local roadways and neighborhood activities are the controlling factors for background noise levels in the majority of the Plan area. In general, the Plan area could be characterized as very quiet to relatively quiet.

The L_{eq} values in Table 3.10-5 represent the average measured noise levels during the sample periods. The L_{eq} values were the basis of the estimated L_{dn} values. The L_{max} values show the maximum noise levels observed during the samples. The L_{50} and L_{90} values represent the noise levels exceeded 50 percent and 90 percent of the time during the sample period. The continuous monitoring data are shown graphically in Figure 3.10-3. The graphs show that ambient noise levels generally reach a minimum at the hour of 2:00 a.m., increasing during the daytime hours as a function of increased traffic and other human activities.

Table 3.10-5
Summary of Measured Noise Levels and Estimated Day/Night Average Levels (L_{dn})

Site	Location	Time Period	Sound Level, dB				
			L_{eq}	L_{50}	L_{90}	L_{max}	Estimated L_{dn}
1*	Todd Valley Road Church of Latter Day Saints	6/8-9/2000					
		Daytime (7am-10pm)	41.2	39	33	54.8	
		Nighttime(10pm-7am)	36.9	33	30	50.8	44.2
2*	Foresthill 625 Harrison Street	6/8-9/2000					
		Daytime (7am-10pm)	44.2	38	34	63.2	
		Nighttime(10pm-7am)	32.0	27	25	51.5	43.5
3	Yankee Jim's Road @ Spring Garden Road	6/8/2000 (Ld)	36.2	36	33	44.7	
		6/9/2000 (Ln)	34.1	33	32	45.0	43.5
4	Todd Valley Road @ Patent Road	6/8/2000 (Ld)	38.1	38	36	46.4	
		6/9/2000 (Ln)	36.6	35	33	44.6	43.3
5	Foresthill @Church Street Cemetery	6/8/2000 (Ld)	41.2	39	34	51.0	
		6/9/2000 (Ln)	40.0	37	32	49.4	46.6
6	Baker Ranch Sequoia Road	6/8/2000 (Ld)	37.5	37	31	47.2	
		6/9/2000 (Ln)	34.2	34	31	45.7	41.3

* = Continuous Monitoring Site

Ld = Measured noise level during daytime hours (7:00 am - 10:00 pm)

Ln = Measured noise level during nighttime hours (10:00 pm - 7:00 am)

Source: Bollard & Brennan, 2000

3.10.3 IMPACT EVALUATION CRITERIA

Appendix G (Environmental Checklist Form) of the State CEQA Guidelines indicates that significant noise impacts occur when a project exposes people to noise levels in excess of

standards established in local noise ordinances or general plan noise elements, or causes a substantial permanent or temporary increase in noise levels above levels existing without the project. Following is a discussion of local noise level criteria; the concept of substantial noise increases; and the standard of significance for construction noise, existing industrial/commercial noise that may affect the project, on-site traffic noise, offsite traffic noise and aircraft noise.

Local Noise Level Criteria

For transportation-related noise sources the Placer County stand of significance is 60 db L_{dn} . The 60 db L_{dn} applied by Placer County is also the standard of significance for non-transportation-related noise sources.

Substantial Noise Increases

Transportation-Related Noise Sources

CEQA does not define the word “substantial” as used in the Guidelines. Some guidance to the concept of substantial noise increases was provided in 1992 by the Federal Interagency Committee on Noise (FICON), which addressed changes in noise levels resulting from aircraft operations. Their recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of the L_{dn} or CNEL. Annoyance is a summary measure of the general adverse reaction of people to noise that generated speech interference, sleep disturbance or interference with the desire for a tranquil environment.

Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis for all transportation noise sources that are described in terms of cumulative noise exposure descriptors such as the L_{dn} or CNEL. These descriptors define noise exposure in terms of average noise exposure during a 24-hour period, with penalties added to noise that occurs during the nighttime or evening. Table 3.10-6 summarizes the FICON recommendations.

**Table 3.10-6
Substantial Increases for
Transportation Noise Exposure**

Ambient Noise Level Without Project (L_{dn} or CNEL)	Significant Impact Assumed to Occur if the Project Increases Ambient Noise Levels By:
<60 dB	+5 dB or more
60-65 dB	+3 dB or more
>65 dB	+2 dB or more

Sources: FICON, as applied by Brown-Buntin Associates, Inc.

Non-Transportation-Related Noise Sources

For these types of noise sources, it is common to assume that a minimum 3 dB increase in noise levels represents a substantial increase in ambient noise levels. This is based on laboratory tests that indicate a 3 dB increase is the minimum change perceptible to most people.

Construction Noise

Construction noise compatibility criteria are not specifically addressed in the Placer County Noise Element.

Existing Industrial/Commercial Noise

The 60 dB L_{dn} exterior and 45 dB L_{dn} interior criteria apply to existing industrial/commercial facilities that may affect residential uses in the proposed Plan area.

Aircraft Noise

The 60 dB L_{dn} exterior and 45 dB L_{dn} interior criteria apply to aircraft noise that may affect residential uses in the proposed Plan area.

On-Site Traffic Noise

The 60 dB L_{dn} exterior and 45 dB L_{dn} interior criteria apply to new noise-sensitive land uses in the proposed Plan area.

Offsite Traffic Noise

The 60 dB L_{dn} exterior and 45 dB L_{dn} interior criteria apply to existing noise-sensitive uses outside the Plan area that may be affected by increased traffic attributable to the FDCP. Also, substantial increases in traffic noise levels attributable to the Plan are significant impacts.

3.10.4 IMPACTS AND MITIGATION MEASURES

3.10-1 Noise impacts due to increased roadway traffic in the Plan area.

To describe traffic noise levels due to and upon the Plan area, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calvenno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict traffic noise levels in terms of L_{dn} , it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Traffic volumes for future conditions and scenarios were provided by kdAnderson Transportation Engineers. A complete listing of the FHWA Model input data for future conditions is provided in Appendix E.

Table 3.10-7 shows the predicted traffic noise levels. The table is provided in terms of L_{dn} at a standard distance of 100 feet from the centerlines of the Plan area. Placement of noise-sensitive uses within the distances shown on Table 3.10-7 would result in a *potentially significant impact*.

Table 3.10-7
Future Traffic Noise Levels
Distance (Feet) from Center of Roadway to L_{dn} Contours

Segment	Description	Ldn Contour		
		55 dB	60 dB	65 dB
Yankee Jim's Road				
1	North of Race Track Road	56	26	12
Foresthill Road				
2	East of Foresthill Bridge	532	247	115
3	South of Lutheran Church	362	168	78
4	West of Race Track Road	376	174	81
5	At Yankee Jim's Road	335	156	72
Main Street				
6	East of Foresthill Road	30	14	7
McKeon-Ponderosa Way				
7	South of Foresthill Road	67	31	15
Michigan Bluff Road				
8	East of Foresthill Road	26	12	6
Race Track Road				
9	North of Foresthill Road	63	29	14
Todd Valley Road				
10	At Foresthill Road West	101	47	22
11	At Foresthill Road East	30	14	6
12	Todd Valley Road Extension (Proposed)	44	20	10
Happy Pines Road				
13	East of Foresthill Road	61	28	13
Mosquito Ridge Road				
14	East of Foresthill Road	63	29	14
Spring Garden Road				
15	West of Foresthill Road	49	23	11
Power Line Road (Proposed)				
16	Proposed New Road	13	6	3

Segment	Description	Ldn Contour		
		55 dB	60 dB	65 dB

Distances to roadway noise contours are from the roadway centerline.

Traffic Data Provided by kdAnderson Transportation Engineers.

Source: Bollard and Brennan, 2002.

Mitigation Measure

The Noise Element of the Placer County General Plan requires preparation of an acoustical analysis under certain circumstances, including when proposed non-residential land uses are likely to produce noise levels that exceed adopted standards at existing or planned noise sensitive uses, or where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding adopted standards. The project-specific acoustical analysis will recommend appropriate mitigation to achieve compliance with the policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Implementation of one or more of the following measures on a project-by-project basis should reduce impacts to a *less than significant level*:

Any noise problem may be considered as being composed of three basic elements: the noise source, a transmission path, and a receiver. The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. The problem should be defined in terms of appropriate criteria (L_{dn} , L_{eq} , or L_{max}), the location of the sensitive receiver (inside or outside), and when the problem occurs (daytime or nighttime). Noise control techniques should then be selected to provide an acceptable noise environment for the receiving property while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options include the following:

3.10-1a *Use of Setbacks.* Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, storage yards, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally about 4 to 6 dB per doubling of distance from the source.

3.10-1b *Use of Barriers.* Shielding by barriers can be obtained by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path-

length-difference for a given increase in barrier height than does a location closer to either source or receiver.

For maximum effectiveness, barriers must be continuous and relatively airtight along their length and height. To ensure that sound transmission through the barrier is insignificant, barrier mass should be about 4 lbs./square foot, although a lesser mass may be acceptable if the barrier material provides sufficient transmission loss. Satisfaction of the above criteria requires substantial and well-fitted barrier materials, placed to intercept line of sight to all significant noise sources. Earth, in the form of berms or the face of a depressed area, is also an effective barrier material.

Transparent noise barriers may be employed, and have the advantage of being aesthetically pleasing in some environments. Transparent barrier materials such as laminated glass and polycarbonate provide adequate transmission loss for most highway noise control applications. Transparent barrier materials may be flammable, and may be easily abraded. Some materials may lose transparency upon extended exposure to sunlight. Maintaining aesthetic values requires that transparent barriers be washed on a regular basis. These properties of transparent barrier materials require that the feasibility of their use be considered on a case-by-case basis.

The attenuation provided by a barrier depends upon the frequency content of the source. Generally, higher frequencies are attenuated (reduced) more readily than lower frequencies. This results because a given barrier height is relatively large compared to the shorter wavelengths of high frequency sounds, while relatively small compared to the longer wavelengths of the low frequency sounds. The effective center frequency for traffic noise is usually considered to be 550 Hz. Railroad engines, cars and horns emit noise with differing frequency content, so the effectiveness of a barrier will vary for each of these sources. Frequency analyses are necessary to properly calculate barrier effectiveness for noise from sources other than highway traffic.

There are practical limits to the noise reduction provided by barriers. For highway traffic noise, a 5 to 10 dB noise reduction may often be reasonably attained. A 15 dB noise reduction is sometimes possible, but a 20 dB noise reduction is extremely difficult to achieve. Barriers usually are provided in the form of walls, berms, or berm/wall combinations. The use of an earth berm in lieu of a solid wall may provide up to 3 dB additional attenuation over that attained by a solid wall alone, due to the absorption provided by the earth. Berm/wall combinations offer slightly better acoustical performance than solid walls, and are often preferred for aesthetic reasons.

3.10-1c *Site Design. Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by reflections. The use of one building to shield another can*

significantly reduce overall project noise control costs, particularly if the shielding structure is insensitive to noise. As an example, carports or garages can be used to form or complement a barrier shielding adjacent dwellings or an outdoor activity area. Similarly, one residential unit can be placed to shield another so that noise reduction measures are needed for only the building closest to the noise source. Placement of outdoor activity areas within the shielded portion of a building complex, such as a central courtyard, can be an effective method of providing a quiet retreat in an otherwise noisy environment. Patios or balconies should be placed on the side of a building opposite the noise source, and "wing walls" can be added to buildings or patios to help shield sensitive uses.

- 3.10-1d *Building Design.* *When structures have been located to provide maximum noise reduction by barriers or site design, noise reduction measures may still be required to achieve an acceptable interior noise environment. The cost of such measures may be reduced by placement of interior dwelling unit features. For example, bedrooms, living rooms, family rooms and other noise-sensitive portions of a dwelling can be located on the side of the unit farthest from the noise source.*

Bathrooms, closets, stairwells and food preparation areas are relatively insensitive to exterior noise sources, and can be placed on the noisy side of a unit. When such techniques are employed, noise reduction requirements for the building facade can be significantly reduced, although the architect must take care to isolate the noise impacted areas by the use of partitions or doors.

In some cases, external building facades can influence reflected noise levels affecting adjacent buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an "urban canyon" may be created. Bell-shaped or irregular building facades and attention to the orientation of the building can reduce this effect.

- 3.10-1e *Noise Reduction by Building Facades.* *When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades. Standard residential construction practices provide 10-15 dB noise reduction for building facades with open windows, and approximately 20 dB to 25 dB noise reduction when windows are closed. Thus a 20 dB exterior-to-interior noise reduction can be obtained by the requirement that building design include adequate ventilation systems, allowing windows on a noise-impacted facade to remain closed under any weather condition.*

Where greater noise reduction is required, acoustical treatment of the building facade is necessary. Reduction of relative window area is the most effective control technique, followed by providing acoustical glazing (thicker glass or increased air space between panes) in low air infiltration rate frames, use of fixed (non-movable) acoustical glazing or the elimination of windows. Noise transmitted through walls can be reduced by increasing wall mass (using stucco or brick in lieu of wood siding), isolating wall members by the use of double- or

staggered- stud walls, or mounting interior walls on resilient channels. Noise control for exterior doorways is provided by reducing door area, using solid-core doors, and by acoustically sealing door perimeters with suitable gaskets. Roof treatments may include the use of plywood sheathing under roofing materials.

Whichever noise control techniques are employed, it is essential that attention be given to installation of weatherstripping and caulking of joints. Openings for attic or sub-floor ventilation may also require acoustical treatment; tight-fitting fireplace dampers and glass doors may be needed in aircraft noise-impacted areas.

Design of acoustical treatment for building facades should be based upon analysis of the level and frequency content of the noise source. The transmission loss of each building component should be defined, and the composite noise reduction for the complete facade calculated, accounting for absorption in the receiving room. A one-third octave band analysis is a definitive method of calculating the A-weighted noise reduction of a facade.

- 3.10-1f Use of Vegetation. *Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 100 feet of dense foliage (so that no visual path extends through the foliage) is required to achieve a 5 dB attenuation of traffic noise. Thus the use of vegetation as a noise barrier should not be considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.*

Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected. It should be noted, however, that trees planted on the top of a noise control berm can actually slightly degrade the acoustical performance of the barrier. This effect can occur when high frequency sounds are diffracted (bent) by foliage and directed downward over a barrier.

In summary, the effects of vegetation upon noise transmission are minor, and are primarily limited to increased absorption of high frequency sounds and to reducing adverse public reaction to the noise by providing aesthetic benefits.

3.10-2 Noise impacts due to the introduction of additional stationary noise sources in the Plan area.

There are a variety of noise sources associated with future development within the Plan area which have the potential to create noise levels in excess of the General Plan noise standards or result in annoyance at existing and future noise-sensitive developments within the Plan area.

Such uses/noise sources include, but are not limited to, fire stations, commercial loading docks associated with grocery stores, school playgrounds and neighborhood parks.

At the Community Plan level, detailed site and grading plans associated with these types of noise sources have not yet been developed. As a result, it is not feasible to identify specific noise impacts associated with these sources. Rather, the potential for these sources to generate ***potentially significant*** excessive or annoying noise levels is identified, and consideration of that potential during the design phases of the development is encouraged. Additional discussion and examples of noise generation of some of these types of uses follows:

Loading Docks. Due to the elevated noise emissions of heavy trucks and the common practice of utilizing loading docks during late night or early morning hours, adverse public reaction to loading dock usage is not uncommon. This is especially true if heavy trucks idle during unloading or if refrigeration trucks are parked in close proximity to residential boundaries.

Average noise levels for single idling trucks generally range from 60 to 65 dB L_{eq} at a distance of 100 feet, and maximum noise levels associated with heavy truck passages range from 70 to 75 dB L_{max} at a distance of 100 feet. Maximum noise levels generated by passages of medium duty delivery trucks generally range from 55 to 65 dB at a distance of 100 feet, depending on whether or not the driver is accelerating. In light of these levels, a single heavy truck pass-by on a loading dock access route could result in adverse public reaction to noise levels and could exceed the General Plan criteria.

The potential for adverse noise impacts associated with loading dock usage could be reduced by restricting heavy truck arrivals or departures during the nighttime hours, by requiring that heavy truck drivers turn off their engines while parked at the loading dock, and by requiring solid noise barriers along the side of the loading docks. It should be noted, however, that such measures may not be sufficient to ensure compliance with the applicable Noise Element standards. Due to the potential for adverse public reaction to new loading docks in close proximity to existing residential uses, the noise effects associated with proposals for new loading docks are ***potentially significant*** and should be carefully evaluated.

Schools/Playgrounds/Day Care Centers. Children playing on school playgrounds, at neighborhood parks and in day care centers are often considered ***potentially significant*** noise sources which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at a distance of 50 feet generally range from 55 to 60 dB L_{eq} , with maximum noise levels ranging from 70 to 75 dB.

Given the proximity of most schools, parks and day care centers to residential uses, the potential for exceedance of the Noise Element standards exists, depending on the orientation and proximity of the play areas to those nearest residences, the number of children using the play areas at a given time, and the types of activities the children are engaged in.

Practical noise mitigation measures could be utilized to reduce the potential for adverse noise impacts associated with children playing at these types of uses. Such measures could include requiring minimum setbacks between play areas and residential property lines, requiring noise

barriers at the perimeter of the play areas, and by limiting the number of children using the play areas at a given time. Nonetheless, because sounds consisting of speech have been shown to be more annoying than broad-band noise, and because children often take great pride in being loud, the potential for annoyance associated with these uses is **significant** and cannot practically be eliminated, except through proper separation of land uses, as provided by the FDCP and the General Plan Noise Element.

Mitigation Measure

Implementation of one or more of the following measures should reduce impacts to a *less than significant level*:

Any noise problem may be considered as being composed of three basic elements: the noise source, a transmission path, and a receiver. The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. The problem should be defined in terms of appropriate criteria (L_{dn} , L_{eq} , or L_{max}), the location of the sensitive receiver (inside or outside), and when the problem occurs (daytime or nighttime). Noise control techniques should then be selected to provide an acceptable noise environment for the receiving property while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options include the following:

3.10-2a *Use of Setbacks. Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setback areas can take the form of open space, frontage roads, recreational area, storage yards, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally about 4 to 6 dB per doubling of distance from the source.*

3.10-2b *Use of Barriers. Shielding by barriers can be obtained by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.*

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path-length-difference for a given increase in barrier height than does a location closer to either source or receiver.

For maximum effectiveness, barriers must be continuous and relatively airtight along their length and height. To ensure that sound transmission through the barrier is insignificant, barrier mass should be about 4 lbs./square foot, although a lesser mass may be acceptable if the barrier material provides sufficient

transmission loss. Satisfaction of the above criteria requires substantial and well-fitted barrier materials, placed to intercept line of sight to all significant noise sources. Earth, in the form of berms or the face of a depressed area, is also an effective barrier material.

Transparent noise barriers may be employed, and have the advantage of being aesthetically pleasing in some environments. Transparent barrier materials such as laminated glass and polycarbonate provide adequate transmission loss for most highway noise control applications. Transparent barrier materials may be flammable, and may be easily abraded. Some materials may lose transparency upon extended exposure to sunlight. Maintaining aesthetic values requires that transparent barriers be washed on a regular basis. These properties of transparent barrier materials require that the feasibility of their use be considered on a case-by-case basis.

The attenuation provided by a barrier depends upon the frequency content of the source. Generally, higher frequencies are attenuated (reduced) more readily than lower frequencies. This results because a given barrier height is relatively large compared to the shorter wavelengths of high frequency sounds, while relatively small compared to the longer wavelengths of the low frequency sounds. The effective center frequency for traffic noise is usually considered to be 550 Hz. Railroad engines, cars and horns emit noise with differing frequency content, so the effectiveness of a barrier will vary for each of these sources. Frequency analyses are necessary to properly calculate barrier effectiveness for noise from sources other than highway traffic.

There are practical limits to the noise reduction provided by barriers. For highway traffic noise, a 5 to 10 dB noise reduction may often be reasonably attained. A 15 dB noise reduction is sometimes possible, but a 20 dB noise reduction is extremely difficult to achieve. Barriers usually are provided in the form of walls, berms, or berm/wall combinations. The use of an earth berm in lieu of a solid wall may provide up to 3 dB additional attenuation over that attained by a solid wall alone, due to the absorption provided by the earth. Berm/wall combinations offer slightly better acoustical performance than solid walls, and are often preferred for aesthetic reasons.

- 3.10-2c Site Design. *Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by reflections. The use of one building to shield another can significantly reduce overall project noise control costs, particularly if the shielding structure is insensitive to noise. As an example, carports or garages can be used to form or complement a barrier shielding adjacent dwellings or an outdoor activity area. Similarly, one residential unit can be placed to shield another so that noise reduction measures are needed for only the building closest to the noise source. Placement of outdoor activity areas within the shielded portion of a building complex, such as a central courtyard, can be an effective*

method of providing a quiet retreat in an otherwise noisy environment. Patios or balconies should be placed on the side of a building opposite the noise source, and "wing walls" can be added to buildings or patios to help shield sensitive uses.

- 3.10-2d *Building Design.* *When structures have been located to provide maximum noise reduction by barriers or site design, noise reduction measures may still be required to achieve an acceptable interior noise environment. The cost of such measures may be reduced by placement of interior dwelling unit features. For example, bedrooms, living rooms, family rooms and other noise-sensitive portions of a dwelling can be located on the side of the unit farthest from the noise source.*

Bathrooms, closets, stairwells and food preparation areas are relatively insensitive to exterior noise sources, and can be placed on the noisy side of a unit. When such techniques are employed, noise reduction requirements for the building facade can be significantly reduced, although the architect must take care to isolate the noise impacted areas by the use of partitions or doors.

In some cases, external building facades can influence reflected noise levels affecting adjacent buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an "urban canyon" may be created. Bell-shaped or irregular building facades and attention to the orientation of the building can reduce this effect.

- 3.10-2e *Noise Reduction by Building Facades.* *When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades. Standard residential construction practices provide 10-15 dB noise reduction for building facades with open windows, and approximately 20 dB to 25 dB noise reduction when windows are closed. Thus a 20 dB exterior-to-interior noise reduction can be obtained by the requirement that building design include adequate ventilation systems, allowing windows on a noise-impacted facade to remain closed under any weather condition.*

Where greater noise reduction is required, acoustical treatment of the building facade is necessary. Reduction of relative window area is the most effective control technique, followed by providing acoustical glazing (thicker glass or increased air space between panes) in low air infiltration rate frames, use of fixed (non-movable) acoustical glazing or the elimination of windows. Noise transmitted through walls can be reduced by increasing wall mass (using stucco or brick in lieu of wood siding), isolating wall members by the use of double- or staggered- stud walls, or mounting interior walls on resilient channels. Noise control for exterior doorways is provided by reducing door area, using solid-core doors, and by acoustically sealing door perimeters with suitable gaskets. Roof treatments may include the use of plywood sheathing under roofing materials.

Whichever noise control techniques are employed, it is essential that attention be given to installation of weatherstripping and caulking of joints. Openings for

attic or sub-floor ventilation may also require acoustical treatment; tight-fitting fireplace dampers and glass doors may be needed in aircraft noise-impacted areas.

Design of acoustical treatment for building facades should be based upon analysis of the level and frequency content of the noise source. The transmission loss of each building component should be defined, and the composite noise reduction for the complete facade calculated, accounting for absorption in the receiving room. A one-third octave band analysis is a definitive method of calculating the A-weighted noise reduction of a facade.

- 3.10-2f *Use of Vegetation.* *Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 100 feet of dense foliage (so that no visual path extends through the foliage) is required to achieve a 5 dB attenuation of traffic noise. Thus the use of vegetation as a noise barrier should not be considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.*

Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected. It should be noted, however, that trees planted on the top of a noise control berm can actually slightly degrade the acoustical performance of the barrier. This effect can occur when high frequency sounds are diffracted (bent) by foliage and directed downward over a barrier.

In summary, the effects of vegetation upon noise transmission are minor, and are primarily limited to increased absorption of high frequency sounds and to reducing adverse public reaction to the noise by providing aesthetic benefits.

3.10-3 Interior noise impacts for all sources within the Plan area.

Standard residential construction (wood siding, STC-26 windows, door weatherstripping, exterior wall insulation, composition plywood roof), results in an exterior to interior noise reduction between 20 dB and 25 dB with windows closed, and approximately 15 dB with windows open. Generally, exterior building facades which are exposed to noise levels exceeding 65 dB L_{dn} require either a detailed analysis of interior noise levels when building plans are available, or additional noise control measures can be incorporated into the project design. Living spaces within the first floors which receive adequate shielding from noise barriers to reduce overall noise levels to less than 65 dB L_{dn} do not require further mitigation or analysis. Therefore, first or second floor facades which are exposed to exterior noise levels in excess of 65 dB L_{dn} could exceed the interior noise level criteria, a ***potentially significant impact***.

Mitigation Measure

Implementation of one or more of the following measures should reduce impacts to a *less than significant level*:

Any noise problem may be considered as being composed of three basic elements: the noise source, a transmission path, and a receiver. The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. The problem should be defined in terms of appropriate criteria (L_{dn} , L_{eq} , or L_{max}), the location of the sensitive receiver (inside or outside), and when the problem occurs (daytime or nighttime). Noise control techniques should then be selected to provide an acceptable noise environment for the receiving property while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options include the following:

3.10-3a *Use of Setbacks. Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setback areas can take the form of open space, frontage roads, recreational area, storage yards, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally about 4 to 6 dB per doubling of distance from the source.*

3.10-3b *Use of Barriers. Shielding by barriers can be obtained by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.*

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path-length-difference for a given increase in barrier height than does a location closer to either source or receiver.

For maximum effectiveness, barriers must be continuous and relatively airtight along their length and height. To ensure that sound transmission through the barrier is insignificant, barrier mass should be about 4 lbs./square foot, although a lesser mass may be acceptable if the barrier material provides sufficient transmission loss. Satisfaction of the above criteria requires substantial and well-fitted barrier materials, placed to intercept line of sight to all significant noise sources. Earth, in the form of berms or the face of a depressed area, is also an effective barrier material.

Transparent noise barriers may be employed, and have the advantage of being aesthetically pleasing in some environments. Transparent barrier materials such

as laminated glass and polycarbonate provide adequate transmission loss for most highway noise control applications. Transparent barrier materials may be flammable, and may be easily abraded. Some materials may lose transparency upon extended exposure to sunlight. Maintaining aesthetic values requires that transparent barriers be washed on a regular basis. These properties of transparent barrier materials require that the feasibility of their use be considered on a case-by-case basis.

The attenuation provided by a barrier depends upon the frequency content of the source. Generally, higher frequencies are attenuated (reduced) more readily than lower frequencies. This results because a given barrier height is relatively large compared to the shorter wavelengths of high frequency sounds, while relatively small compared to the longer wavelengths of the low frequency sounds. The effective center frequency for traffic noise is usually considered to be 550 Hz. Railroad engines, cars and horns emit noise with differing frequency content, so the effectiveness of a barrier will vary for each of these sources. Frequency analyses are necessary to properly calculate barrier effectiveness for noise from sources other than highway traffic.

There are practical limits to the noise reduction provided by barriers. For highway traffic noise, a 5 to 10 dB noise reduction may often be reasonably attained. A 15 dB noise reduction is sometimes possible, but a 20 dB noise reduction is extremely difficult to achieve. Barriers usually are provided in the form of walls, berms, or berm/wall combinations. The use of an earth berm in lieu of a solid wall may provide up to 3 dB additional attenuation over that attained by a solid wall alone, due to the absorption provided by the earth. Berm/wall combinations offer slightly better acoustical performance than solid walls, and are often preferred for aesthetic reasons.

3.10-3c *Site Design. Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by reflections. The use of one building to shield another can significantly reduce overall project noise control costs, particularly if the shielding structure is insensitive to noise. As an example, carports or garages can be used to form or complement a barrier shielding adjacent dwellings or an outdoor activity area. Similarly, one residential unit can be placed to shield another so that noise reduction measures are needed for only the building closest to the noise source. Placement of outdoor activity areas within the shielded portion of a building complex, such as a central courtyard, can be an effective method of providing a quiet retreat in an otherwise noisy environment. Patios or balconies should be placed on the side of a building opposite the noise source, and "wing walls" can be added to buildings or patios to help shield sensitive uses.*

3.10-3d *Building Design. When structures have been located to provide maximum noise reduction by barriers or site design, noise reduction measures may still be required to achieve an acceptable interior noise environment. The cost of such*

measures may be reduced by placement of interior dwelling unit features. For example, bedrooms, living rooms, family rooms and other noise-sensitive portions of a dwelling can be located on the side of the unit farthest from the noise source.

Bathrooms, closets, stairwells and food preparation areas are relatively insensitive to exterior noise sources, and can be placed on the noisy side of a unit. When such techniques are employed, noise reduction requirements for the building facade can be significantly reduced, although the architect must take care to isolate the noise impacted areas by the use of partitions or doors.

In some cases, external building facades can influence reflected noise levels affecting adjacent buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an "urban canyon" may be created. Bell-shaped or irregular building facades and attention to the orientation of the building can reduce this effect.

3.10-3e Noise Reduction by Building Facades. *When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades. Standard residential construction practices provide 10-15 dB noise reduction for building facades with open windows, and approximately 20 dB to 25 dB noise reduction when windows are closed. Thus a 20 dB exterior-to-interior noise reduction can be obtained by the requirement that building design include adequate ventilation systems, allowing windows on a noise-impacted facade to remain closed under any weather condition.*

Where greater noise reduction is required, acoustical treatment of the building facade is necessary. Reduction of relative window area is the most effective control technique, followed by providing acoustical glazing (thicker glass or increased air space between panes) in low air infiltration rate frames, use of fixed (non-movable) acoustical glazing or the elimination of windows. Noise transmitted through walls can be reduced by increasing wall mass (using stucco or brick in lieu of wood siding), isolating wall members by the use of double- or staggered- stud walls, or mounting interior walls on resilient channels. Noise control for exterior doorways is provided by reducing door area, using solid-core doors, and by acoustically sealing door perimeters with suitable gaskets. Roof treatments may include the use of plywood sheathing under roofing materials.

Whichever noise control techniques are employed, it is essential that attention be given to installation of weatherstripping and caulking of joints. Openings for attic or sub-floor ventilation may also require acoustical treatment; tight-fitting fireplace dampers and glass doors may be needed in aircraft noise-impacted areas.

Design of acoustical treatment for building facades should be based upon analysis of the level and frequency content of the noise source. The transmission loss of each building component should be defined, and the composite noise

reduction for the complete facade calculated, accounting for absorption in the receiving room. A one-third octave band analysis is a definitive method of calculating the A-weighted noise reduction of a facade.

- 3.10-3f *Use of Vegetation.* *Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 100 feet of dense foliage (so that no visual path extends through the foliage) is required to achieve a 5 dB attenuation of traffic noise. Thus the use of vegetation as a noise barrier should not be considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.*

Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected. It should be noted, however, that trees planted on the top of a noise control berm can actually slightly degrade the acoustical performance of the barrier. This effect can occur when high frequency sounds are diffracted (bent) by foliage and directed downward over a barrier.

In summary, the effects of vegetation upon noise transmission are minor, and are primarily limited to increased absorption of high frequency sounds and to reducing adverse public reaction to the noise by providing aesthetic benefits.

3.10-4 Noise from construction-related activities in the Plan area may exceed adopted noise standards.

Noise from construction activities in the Plan area could potentially affect noise-sensitive land uses in the immediate area. Construction activities would be scattered throughout the Plan area (though more likely to occur in the community of Foresthill), would be temporary in nature, and would most likely occur only during the daytime hours. Construction noise impacts could result in annoyance or sleep disruption for nearby residents if nighttime operations were to occur, or if equipment is not properly muffled or maintained. This impact is ***potentially significant***.

Mitigation Measure

Implementation of the following measure will reduce construction-related noise impacts to a *less than significant level*:

- 3.10-4 *The hours of operation of noise-producing construction equipment shall be restricted to 7:00 a.m. to 7:00 p.m. Mondays through Fridays, and 9:00 a.m. to 6:00 p.m. on Saturdays and Sundays. Effective mufflers shall be fitted to gas- and diesel-powered equipment to reduce noise levels as much as possible.*

CHAPTER 5

MANDATORY CEQA SECTIONS:

CONSEQUENCES OF PROJECT IMPLEMENTATION

This Chapter contains required discussions and analysis of various issues mandated by CEQA. Section 15128 of the State CEQA Guidelines requires that an EIR contain a statement briefly indicating the reasons that various possible new significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the EIR. CEQA Guidelines Section 15130 requires that an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. In addition, CEQA requires assessment of significant environmental effects that cannot be avoided if the project is implemented, growth-inducing impacts, and irreversible environmental changes and irretrievable commitment of resources. This section will discuss the following topics specifically related to this project:

- 5.1 Effects Not Found to be Significant
- 5.2 Unavoidable Impacts
- 5.3 Irreversible Impacts
- 5.4 Cumulative Impacts
- 5.5 Growth-Inducing Impacts

5.1 EFFECTS NOT FOUND TO BE SIGNIFICANT

As noted above, Section 15128 of the State CEQA Guidelines requires that an EIR contain a statement briefly indicating the reasons why various possible new significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the EIR. For this project, those effects were determined based on initial analysis in the Initial Study/Environmental Checklist, the discussion contained in the Notice of Preparation, and the evaluation of impacts undertaken as part of this EIR process. Effects of this project not found to be significant are presented in this section.

- Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project.
- Disruption or division of the physical arrangement of an established community (including a low-income or minority community).
- Displacement of existing housing, especially affordable housing.
- The destruction, covering or modification of any unique geologic or physical features.
- Changes in currents, or the course or direction of water movements.

- Altered direction or rate of flow of groundwater.
- Creation of objectionable odors.
- Insufficient parking capacity on-site or off-site.
- Hazards or barriers for pedestrians or bicyclists.
- Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks).
- Rail, waterborne, or air traffic impacts.
- Impacts to important spawning areas for anadromous fish.
- Conflict with adopted energy conservation plans.
- Use of non-renewable resources in a wasteful and inefficient manner.
- The creation of any health hazard or potential health hazard.
- A need for or substantial alterations to solid waste materials recovery or disposal.

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Since the phrase “significant effect on the environment” occupies such a critical role in the preparation and review of an EIR, the following definition, as contained in Section 15382 of the State CEQA Guidelines, is provided for reference:

“Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

Section 15126.2(b) of the State CEQA Guidelines requires that the EIR describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

The environmental effects of the proposed FDCP on selected aspects of the environment are discussed in detail in Chapter Three of this EIR. Significant or potentially significant effects that cannot be avoided if the proposed FDCP is approved and development is carried out as proposed

are presented below. Other unavoidable impacts attributable to implementation of the proposed FDCP have either been determined to be less than significant, or are capable of being mitigated to less than significant levels by measures recommended in this EIR.

- **Loss of open space resulting from development in accordance with the FDCP (Impact 3.2-3).** Development of the Plan area in accordance with the proposed FDCP would allow conversion of lands currently in undeveloped open space to residential, commercial, industrial or public uses. While the proposed FDCP will allow for less conversion of open space than the existing (1981) Foresthill General Plan, impacts must be measured in comparison to existing conditions rather than future planned uses. The majority of the Plan area is designated for Public Ownership (53%), Agricultural/Timberland (23%), and Forestry (12.4%). The remaining lands (less than 12%) are designated for Rural Residential (parcel sizes ranging from 2.3 acres to 10 acres), Low and Medium Density Residential, Industrial, Development Reserve, Mixed-Use Areas and Historic Outlying Commercial Areas. Portions of these areas are already developed, and the policies of the FDCP are designed to discourage “leapfrog” development and concentrate development within or near the Core Area of Foresthill. The FDCP includes policies to protect existing agricultural lands, forest and timber resources. Nevertheless, the loss of open space resources through conversion to developed uses represents a significant, unavoidable impact of the proposed FDCP that cannot be mitigated to a less than significant level.
- **Provision of adequate fire protection services and facilities to serve the Plan area (Impact 3.4-4).** The Foresthill Fire District has concluded that full buildout of the Plan area will require additional fire stations and facilities and full-time paid fire fighter coverage. A development fee is currently assessed upon new development in the Plan area to support fire protection services. The FDCP includes policies that address this impact. Many of these policies involve working with other agencies, including the Foresthill Fire District. The goals and policies do not address the provision of additional fire stations and converting from a volunteer to a full-time paid fire protection service. Although fees are collected from new development, it is not clear whether these will be adequate to fund new stations, equipment and paid personnel. Although the County has the ability to deny projects that do not provide for adequate fire protection, providing the facilities, equipment and personnel are outside the control of the County and cannot be assured. Therefore, this impact is considered potentially significant, and may not be mitigated to a level that is less than significant.
- **Alteration of views from scenic highways in the Plan area due to development in accordance with the proposed FDCP (Impact 3.6-3).** The FDCP designates certain road segments as local scenic highways. Implementation of the FDCP will alter some views from the proposed local scenic highways. The forest vegetation and topography of the Plan area will limit the visibility of new development. The FDCP includes numerous goals and policies on the topic of community design that address the promotion, preservation and enhancement of the forested natural and rural atmosphere of the Plan area by requiring high aesthetic quality in all new development. All new development (including major remodeling and reconstruction) must comply with the Foresthill Community Design Guidelines (which are included in the FDCP), the Placer County Rural Design Guidelines, the Placer County Design Guidelines Manual, and the Placer County Landscape Design Guidelines. All new development must be

designed to be compatible with the scale and character of the area. The gateway and scenic corridors that bring residents and visitors into the area must be protected and enhanced. Compliance with the FDCP goals and policies, the Foresthill Community Design Guidelines, and other Placer County design guidelines will reduce the contribution of development to adverse impacts upon scenic vistas and views from scenic highways in the Plan area. It will assure that new development meets an aesthetic standard and open space retention that is not currently required along these roadway segments in the Plan area. Nevertheless, new development in the Plan area will contribute to long-term changes in views from these scenic highways from rural, forested views to views that encompass a greater level of development. This represents a potentially significant impact. No additional mitigation measures are available to reduce this impact to a less than significant level, therefore it will remain potentially significant.

- **Water quality in the Plan area may be degraded following site development by the introduction of urban pollutants including vehicle oils and greases, heavy metals on roads, parking lots, and driveways, fertilizers and pesticides used on site landscaping, and toxic compounds released from auto maintenance areas. Construction during wet or dry weather will affect water quality with increased sedimentation, operation and maintenance of construction vehicles, and storage of materials that could release contamination to surface waters (Impact 3.6-8).** Newly planted vegetation and newly paved roadways could result in long-term water quality degradation. The higher daily use of roads and parking areas would contribute vehicle oils and grease to stormwater discharge. In commercial, industrial and mixed use areas, stormwater runoff may convey a wide range of pollutants to receiving waters. Vehicles contribute oil, grease, and metals onto roads and parking lots. Excessive use of fertilizers, pesticides and herbicides on landscaping can also result in leaching of nutrients and toxic compounds into stormwater runoff. Such compounds are soluble and would not, therefore, be removed by the use of detention basins. Uncontrolled, these urban pollutants can directly or indirectly affect aquatic life. High concentrations of toxins in runoff can be lethal to aquatic life; chronic, low levels may enter the food chain, affecting the long-term breeding success of populations and lower reproductive potential. Aquatic and wildlife habitat can also be adversely affected by the accumulation of toxins, which can indirectly affect aquatic and wildlife resources. Direct discharge from developments could occur towards surface waters. Due to the increase in impervious surfaces and traffic trips in the Plan area, a substantial increase in urban pollutants would gradually occur in the watersheds over the life of the FDCP. Given the extent of proposed development and roadway improvements, the overall potential for generation of urban pollutants, and because drainage is ultimately conveyed into a potable water source, this potential for long-term water quality degradation is considered a potentially significant impact. Implementation of mitigation measures will reduce long-term surface water quality impacts. However, because pollutant levels will not be reduced to pre-development levels, long-term impacts will remain significant and unavoidable.
- **Adverse impacts on riparian habitat in the Plan area due to development in accordance with the proposed FDCP (Impact 3.6-17).** Riparian habitats support numerous plant and wildlife species and are considered a sensitive habitat in provisions of the Placer County General Plan. Projects that propose encroachment into these areas must follow the guidelines presented in the Placer County General Plan and may require a Streambed Alteration

Agreement with the CDFG. The proposed FDCP includes Policies 4.A.2-1, 4.A.2-2, 4.A.2-5, 4.A.3-1, 4.A.3-2, 4.A.3-8, 4.A.7-1, 4.A.7-2, and 4.A.7-3, as well as Implementation Measures #3, 5, 6, 7 and 8 that address this impact. Implementation of the policies and implementation measures of the FDCP will reduce potential impacts on riparian habitat in the Plan area. However, because new development will occur that may affect riparian habitat, this impact is considered potentially significant and unavoidable. No additional mitigation measures are available that would reduce this impact to a less than significant level.

- **Adverse impacts on wildlife movement corridors/deer migration corridors in the Plan area due to development in accordance with the proposed FDCP (Impact 3.6-I8).** Wildlife movement corridors are essential to the distribution of wildlife, providing a means of movement throughout ranges that are encroached with human disturbances. Because a majority of the habitats within the Plan area is relatively undisturbed, these areas provide a means for wildlife movement throughout the Plan area. Further development within these areas will fragment this habitat and may result in obstructing this movement corridor. The effect on deer migration and wildlife movement should be analyzed prior to the approval of any proposed development within the Plan area. The analysis should include consultation with the CDFG and local resources agencies to properly evaluate the current wildlife movement and deer migration patterns in the Plan area. The FDCP includes Policies 4.A.1-7, 4.A.3-1, 4.A.3-2, 4.A.3-4, 4.A.3-10 and 4.A.3-11 that address this impact. Implementation of these policies will reduce impacts on wildlife movement corridors/deer migration corridors in the Plan area. However, because new development will occur that may affect wildlife movement corridors, this impact is considered potentially significant and unavoidable. No additional mitigation measures are available that would reduce this impact to a less than significant level.
- **New stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP, resulting in increased emissions of ROG, NO_x and PM₁₀ (Impact 3.8-I).** Upon FDCP buildout, operation of new uses developed in accordance with the proposed Plan would cause increased emissions by generating new motor vehicle trips and by causing additional energy use and operation of other stationary sources of emissions. These are stationary- and area-source emissions that would be produced either directly in the Plan area, or indirectly through increased use of utilities located elsewhere. Motor vehicle use, energy use, and other stationary sources would cause emissions of ROG, NO_x and PM₁₀ that would contribute to existing violations of state-level and/or federal ambient air quality standards. Although the goals and policies of the FDCP will assist in reducing emissions, development within the Plan area will contribute to regional emissions of these pollutants. Because the Plan area is currently within a nonattainment area for PM₁₀ and ozone and emissions will exceed PCAPCD thresholds, impacts are considered significant and unavoidable.
- **Construction activities associated with development under the proposed FDCP, which will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations (Impact 3.8-2).** Construction activity often produces high levels of fugitive dust, including PM₁₀ particulate matter. Construction-related fugitive dust is generated primarily by grading activities and heavy equipment travel over temporary roads

on-site. Although the goals and policies of the FDCP and Placer County Air Pollution Control District Rules and Regulations will assist in reducing emissions, because the Plan area is currently within a nonattainment area for PM₁₀ and ozone, and construction-related emissions may at times exceed PCAPCD thresholds, impacts are considered potentially significant and unavoidable.

Notwithstanding these significant unavoidable effects, adoption of the FDCP and rezoning is still proposed to implement the Vision and General Goals formulated by the FDCP Team, which were developed through public meetings and the input of the community.

5.3 IRREVERSIBLE IMPACTS

The following excerpt from Section 15126.2(c) of the State CEQA Guidelines defines the nature of this analysis:

Uses of non-renewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area), generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified.

Approval and implementation of the proposed FDCP will commit non-renewable resources during construction and ongoing utility services provided to the Plan area. During construction, the use of energy resources and building materials will essentially be irreversible and irretrievable. Construction will require the commitment of a variety of non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt and metals. Development will result in an increase in regional energy consumption not only during construction, but also relating to lighting, heating and cooling of buildings, and other industrial/manufacturing uses. Fossil fuels are the principal source of energy, and the project will increase consumption of available supplies of petroleum products.

As noted in Chapter Three, degradation of ambient air quality is also an irreversible impact of the proposed FDCP.

5.4 CUMULATIVE IMPACTS

Cumulative impacts are two or more effects that, when combined, are considerable or compound other environmental effects. Each cumulative impact is determined to have one of the following levels of significance: less than significant, significant, or significant and unavoidable.

Section 15130 of the State CEQA Guidelines calls for the following discussion of the cumulative impacts of a proposed project:

- (a) An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in Section 15065(c). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.
- (1) As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.
- (2) When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.
- (3) An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.
- (4) An EIR may determine that a project's contribution to a significant cumulative impact is de minimus and thus is not significant. A de minimus contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.
- (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great a detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impacts. The following elements are necessary to an adequate discussion of significant cumulative impacts:
 - (1) Either:
 - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

- (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency;
1. When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are an issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.
 2. "Probable future projects" may be limited to those projects requiring an agency approval for an application which has been received at the time the notice of preparation is released, unless abandoned by the applicant; projects included in an adopted capital improvements program, general plan, regional transportation plan, or other similar plan; projects included in a summary of projections of projects (or development areas designated) in a general plan or a similar plan; projects anticipated as later phase of a previously approved project (e.g., subdivision); or other public agency projects for which money has been budgeted.
 3. Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.
- (2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and
- (3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.
- (c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.
- (d) Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and

project EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.

- (e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact as provided in Section 15183(j).

The area of cumulative effect associated with the FDCP is described as the FDCP Plan area, which encompasses the entire area (approximately 109 square miles) covered by the proposed FDCP. One major development is currently proposed within the Plan area: the proposed Forest Ranch project, a General Plan Amendment and Rezoning on 2,615± acres north and east of the community of Foresthill. The project site is located north and east of Foresthill Road, and is also crossed by Blackhawk Lane and Yankee Jim's Road. It is referred to in the FDCP as the "Pomfret Estate" property. The proposed project would be an amendment to the 1981 Foresthill General Plan, and would allow development of 2,213 residential units, of which 1,700 would be age-restricted; an 18-hole golf course and associated uses; a 100-unit recreational vehicle park; an equestrian center; professional offices; and open space (1,128± acres of the 2,615± acres).

The proposed Forest Ranch project is not consistent with the land use designations, zoning and standards proposed for that site in the FDCP. Under the FDCP, the project site would be designated for Development Reserve (1,300± acres); Forestry/160 acre minimum on most of the remainder of the site; and small areas designated Ag/Timberland (1 dwelling unit/160 acres) and Low Density Residential (1 dwelling unit/1 acre). The FDCP provides for a maximum of 533 dwelling units to be considered for the subject property, trails, golf course improvements, equestrian boarding stables and staging areas, mountain bike courses, fitness circuits and related facilities. It does not provide for a recreational vehicle park or professional office uses. If the Forest Ranch project is approved as proposed, it would add 1,680 dwelling units to the estimated total of 2,380 new dwelling units that could be developed under the proposed FDCP, as well as the recreational vehicle park and professional offices. It is anticipated that this would, at a minimum, result in a cumulative increase in impacts related to traffic, air quality, water quality, and public services and facilities. The impacts of the proposed Forest Ranch project are being evaluated in detail in an EIR being prepared concurrently with this EIR.

In accordance with Section 15130(d) of the State CEQA Guidelines, this EIR incorporates by reference the cumulative impacts analysis contained in the Placer County General Plan EIR.

Based on the identified region and the nature of the projects described above, Chapter Three of this EIR has identified the following significant cumulative impacts associated with the project and the region:

- **Loss of open space resulting from development in accordance with the FDCP (Impact 3.2-3).** Development of the Plan area in accordance with the proposed FDCP would allow

conversion of lands currently in undeveloped open space to residential, commercial, industrial or public uses. While the proposed FDCP will allow for less conversion of open space than the existing (1981) Foresthill General Plan, impacts must be measured in comparison to existing conditions rather than future planned uses. The majority of the Plan area is designated for Public Ownership (53%), Agricultural/Timberland (23%), and Forestry (12.4%). The remaining lands (less than 12%) are designated for Rural Residential (parcel sizes ranging from 2.3 acres to 10 acres), Low and Medium Density Residential, Industrial, Development Reserve, Mixed-Use Areas and Historic Outlying Commercial Areas. Portions of these areas are already developed, and the policies of the FDCP are designed to discourage “leapfrog” development and concentrate development within or near the Core Area of Foresthill. The FDCP includes policies to protect existing agricultural lands, forest and timber resources. Nevertheless, the loss of open space resources through conversion to developed uses represents a significant, cumulative impact of the proposed FDCP that cannot be mitigated to a less than significant level.

- **Introduction of new sources of light and glare within the Plan area (Impact 3.3-2).** As described in the “Setting” section above, the primary sources of light in the Plan area include headlights on the roadway system (particularly Foresthill Road), commercial development, and industrial facilities. A lighting district has been established in Foresthill, which is limited to the historic downtown area. Residential areas do not have street lights, but some individual residences have security lighting. The Placer County Rural Design Guidelines include a goal that encourages the minimization of artificial lighting on residences, other structures, and along roadways to limit the amount of light pollution. The Guidelines also recommend techniques designed to minimize light pollution. The proposed FDCP includes Policies 3.C.3-6, 3.C.5-1, and 3.C.2-3 related to lighting. Implementation Measure #29 for Natural Resources/Conservation/Open Space calls for adoption of a “dark sky” ordinance to protect important nighttime visual resources in the Plan area. Lighting is also addressed in the proposed Foresthill Community Design Guidelines. Compliance with the goals, policies, implementation measures and Design Guidelines will reduce the contribution of new development to substantial changes in the lighting environment, and improve some existing conditions. However, in comparison to existing conditions, additional development will contribute to a potentially significant cumulative impact on the ambient light conditions in the Plan area. No additional mitigation measures are available to reduce this impact to a less than significant level.
- **Conversion of timber lands to non-timber production use (Impact 3.6-2).** Coniferous forest represents the dominant vegetation community within the Plan area. The Plan area contains an interface between exclusive Placer County land use jurisdiction and the jurisdiction of the U.S. Forest Service, which is responsible for managing land uses and timber resources in the Tahoe National Forest. Additionally, the California Department of Forestry (CDF) has regulatory authority over timber harvest activities on privately held timber land under the Z’Berg Nejedly Forest Practices Act of 1973. Since the Plan area lies within an area designated as Very High Fire Hazard Area, CDF is also actively engaged in fuel reduction programs to reduce the high levels of brush and timber fuel loading that contribute to wildland fire hazard in the area. The goals and policies of the proposed FDCP are designed to protect and preserve existing forest and timber resources. A majority of the Plan area is

designated for Public Ownership (53%), Agricultural/Timberland (23%) and Forestry (12.4%). Policy 4.A.6-2 calls for the County to discourage development that conflicts with timberland management and to protect significant timber production lands from incompatible development. Policy 4.A.6-8 requires the County to maintain a low mathematical density of allowable development in Forestry areas in order to protect major areas of potential timber resources on the Divide from conversion to other more intensive uses. Policy 4.A.6-9 calls for the County to encourage clustering of development in timberland areas within the Forest Residential land use designation to preserve timber resources for productive use, and Policy 4.A.6-10 encourages the use of the Timberland Production Zone for those lands which have significant commercial timber value. Finally, Policy 4.A.6-12 calls for the provision of public facilities and services to be limited in important timber areas on the Foresthill Divide. The proposed FDCP land use designations and zoning are designated to avoid conversion of productive timber lands to non-timber uses, and to allow other development to occur in a manner that does not conflict with timber-related uses. Nevertheless, the loss of productive or potentially productive timber resources through conversion of lands to developed uses represents a potentially significant cumulative impact of the proposed FDCP. No additional mitigation measures are available to reduce this impact to a less than significant level.

- **Adverse impacts on water quality in the Plan area and downstream due to development in accordance with the proposed FDCP (Impact 3.6-7).** The greatest potential threat to water quality within the Plan area is contamination from individual sewage disposal systems. There are no community sewer systems located within the Plan area. All wastewater disposal is by individual systems (some of which serve more than one dwelling unit or business). The only community sewerage systems (i.e., community leach fields, oxidation ponds) are those serving mobile home parks, apartment complexes and multiple houses on one lot. Future growth will continue to be served by septic systems, unless required by Placer County Environmental Health Services to connect to a community sewer system. Sewer systems may be necessary for development of higher densities that generate high sewage flows or concentrate large quantities of sewage in limited areas.

The effectiveness of septic systems remains limited in some areas by shallow soils, massive granitic rock complexes, and excessive slopes that are characteristic of the Plan area. The FDCP provides that the flat region running through the center of the Plan area be served by individual sewage disposal systems on parcel sizes of 2.3 acres or more. Large areas northwest and southwest of this flat area “are marginal to unacceptable for the proper functioning of individual sewage disposal systems,” and sewage systems should be located on parcels ranging from 4.6 to 20 acres or larger. There are areas within the Plan area, however, that do not have shallow soils and are suitable for individual septic systems, such as Todd’s Valley. Other areas may be suitable with the use of engineered septic systems. Soil suitability for septic systems has been taken into consideration in development of the FDCP and the assignment of land use densities in residential, commercial and industrial areas.

Continued use of a community water system is recommended for higher density areas within the Plan area in order to minimize the risk of nitrate contamination in private wells. A significant portion of the Plan area is located outside the Foresthill PUD boundaries and other

water system service areas, and cannot feasibly be connected to a community water system. However, most of these areas are not considered suitable for development.

The proposed FDCP includes numerous policies that address water quality and wastewater disposal. Although these policies and implementation measures address water quality issues associated with on-site disposal systems, the Regional Water Quality Control Board (in their response to the Notice of Preparation, see Appendix A) has indicated that the County has inadequate design criteria for on-site domestic waste disposal systems. The Regional Board has found the Ordinance Governing Individual On-site Sewage Disposal Systems (Placer County Code, Chapter 4, Subchapter 1, Section 4.45) does not meet the Regional Board Guidelines for Waste Disposal From Land Development (Guidelines) and therefore poses a significant impact. This conclusion is also based on the Regional Board's statement that the FDCP policies have not been submitted to them for review as required under Resolution N o. 82-036 to waive Waste Discharge Requirements (WDRs) for septic tank/leachfield systems for large developments. Given the County ordinance does not meet the Guidelines and no additional mitigation has been proposed, the Regional Board believes that the FDCP threatens to degrade water quality. The Regional Board suggests that high density residential discharges can be mitigated with the development of effective community collection, treatment and disposal systems.

Based on the Regional Board's comments, although the FDCP does not propose that large developments utilize individual on-site systems, this impact is considered a potentially significant cumulative impact. However, it can be mitigated to a level that is less than significant.

- **New stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP, resulting in increased emissions of ROG, NO_x and PM₁₀ (Impact 3.8-1).** Upon FDCP buildout, operation of new uses developed in accordance with the proposed Plan would cause increased emissions by generating new motor vehicle trips and by causing additional energy use and operation of other stationary sources of emissions. These are stationary- and area-source emissions that would be produced either directly in the Plan area, or indirectly through increased use of utilities located elsewhere. Motor vehicle use, energy use, and other stationary sources would cause emissions of ROG, NO_x and PM₁₀ that would contribute to existing violations of state-level and/or federal ambient air quality standards. Although the goals and policies of the FDCP will assist in reducing emissions, development within the Plan area will contribute to regional emissions of these pollutants. Because the Plan area is currently within a nonattainment area for PM₁₀ and ozone and emissions will exceed PCAPCD thresholds, impacts are considered significant and cumulative, and cannot be mitigated to a less than significant level.
- **Construction activities associated with development under the proposed FDCP, which will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations (Impact 3.8-2).** Construction activity often produces high levels of fugitive dust, including PM₁₀ particulate matter. Construction-related fugitive dust is generated primarily by grading activities and heavy equipment travel over temporary roads

on-site. Although the goals and policies of the FDCP and Placer County Air Pollution Control District Rules and Regulations will assist in reducing emissions, because the Plan area is currently within a nonattainment area for PM₁₀ and ozone, and emissions may at times exceed PCAPCD thresholds, impacts are considered potentially significant and cumulative, and may not always be mitigated to a less than significant level.

5.5 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the State CEQA Guidelines provides the following direction regarding analysis of growth-inducing impacts:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

As presented in the “Setting” discussion in Section 3.1, Chapter Three, the estimated population of the Plan area for 2000 is 5,600. The population projection for 2010 is a range from 6,467 to 9,091, and the estimated maximum buildout population for the Plan area is 13,500. This is within the context of the population of Placer County, which was 243,646 in 2000, a projected 325,648 in 2010, and a projected 391,245 in 2020. The proposed FDCP represents a substantial reduction in the buildout population of the existing 1981 Foresthill General Plan, which was 28,000+ (for a Plan area approximately one-half the size).

Within the context of planned population growth in Placer County, population growth in the Plan area will not exceed regional population projections, and will not create substantial unplanned growth or concentration of people in the Plan area. As stated in the “Setting” discussion, Foresthill and other unincorporated areas will absorb a portion of the growth in Placer County, but geographical isolation, rugged terrain, and proactive community planning will slow growth to a rate that will not exceed buildout capacity. This was determined to be less than significant. Additionally, the FDCP does not propose to extend utilities in excess of those needed to serve the planned population. The Plan does not propose a community sewer system, and water service would be extended only to developments that are consistent with the proposed Plan. This potential growth-inducing impact is therefore considered less than significant.

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Wells, Greg. California State Parks.

Wells, Mike, Senior Planner. Placer County Planning Department.

Young, Becky. Foresthill Union Elementary School District.

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.1 Population and Housing					
3.1-1	Development in accordance with the FDCP would increase the population in the Plan area.	LS		None required.	
3.1-2	Development of the Plan area in accordance with the FDCP would promote an imbalance of jobs and housing in the Plan area.	LS		None required.	
3.1-3	Development of the Plan area in accordance with the FDCP would not comply with the Housing Element of the Placer County General Plan and would not meet housing needs in the Plan area.	LS		None required.	
3.2 Land Use					
3.2-1	Potential conflicts between the FDCP and the PCGP.	LS		None required.	
3.2-2	Development of incompatible uses and/or creation of land use conflicts within the FDCP area.	LS		None required.	
3.2-3	Loss of open space resulting from development in accordance with the FDCP.	SCU		None available.	SCU

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Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.3 Community Design					
3.3-1	Alteration of views of the Plan area due to development in accordance with the FDCP.	PS		None available.	PS
3.3-2	Introduction of new sources of light and glare within the Plan area.	PSC		None available.	PSC
3.4 Public Facilities					
3.4-1	Provision of adequate sewage disposal services to serve the Plan area.	LS		None required.	
3.4-2	Provision of a safe and adequate water supply and fire flow to serve the Plan area.	LS		None required.	
3.4-3	Provision of adequate schools to serve the Plan area.	LS		None required.	
3.4-4	Provision of adequate fire protection services and facilities to serve the Plan area.	PS		Mitigation measures are available, but are outside the control of the County.	PS
3.4-5	Provision of adequate public protection to serve the Plan area.	LS		None required.	
3.4-6	Provision of adequate flood protection and stormwater drainage for the Plan area.	LS		None required.	
3.4-7	Provision of adequate public utilities to serve the Plan area.	LS		None required.	
3.4-8	Provision of adequate cemeteries, libraries, postal facilities, health	LS		None required.	

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Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
	services, and solid waste collection and disposal services for the Plan area.				
3.5 Parks and Recreation					
3.5-1	Provision of adequate parks and recreation facilities and programs to both residents of and visitors to the Plan area.	LS		None required.	
3.6 Natural Resources/Conservation/Open Space					
3.6-1	Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.	LS		None required.	
3.6-2	Conversion of timber lands to non-timber production use.	PSC		None available.	PSC
3.6-3	Alteration of views from scenic highways in the Plan area due to development in accordance with the proposed FDCP.	PS		None available.	PS
3.6-4	Increased exposure of people and property to geologic hazards in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-5	Increased soil erosion and other soil-related hazards in the Plan area due to development in accordance with the proposed FDCP.	PS	3.6-5a	A geotechnical engineering investigation of proposed development sites shall be prepared by a qualified California-licensed civil engineer prior to any grading or other ground-disturbing	LS

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				activities. All site grading, trenching, cut and fill, engineered soils, and construction shall be in compliance with the recommendations of the geotechnical engineering investigation, including soil index, pH and resistivity testing, fill control, and proper design of cut and fill slopes.	
		PS	3.6-5b	<p>Erosion and ground instability mitigation measures shall include conformance to Chapter A 33 of the 1997 edition of the Uniform Building Code and Placer County's Erosion and Sediment Control Ordinance. The required designs shall include methods to control soil erosion and ground instability. Measures to control soil erosion and mitigate potential differential settlement and construction related ground instability impacts include, but are not limited to, the following:</p> <p>(1) A California licensed civil engineer shall prepare a grading plan for proposed development sites.</p> <p>(2) A Notice of Intent (NOI) and supporting documents shall be submitted to the State Water Resources Control Board (SWRCB). A Storm</p>	LS

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<p>Water Pollution Prevention Plan (SWPPP) shall be prepared for inclusion with construction plans and for regulation of construction activities on development project sites. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of storm water discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges. The SWPPP must include Best Management Practices (BMPs) which address source reduction and sediment capture and retention.</p> <p>(3) Uncemented silty soils are prone to erosion. According to requirements as set forth in Section 402(p) of the Clean Water Act as amended in 1987, and as administered by the SWRCB as described in (2) above, erosion control measures (appropriate Best Management Practices) shall be implemented during construction which conform to the National Pollutant</p>	

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<p>Discharge Elimination System, Storm Drain Standards, and local standards.</p> <p>Any cut or fill slopes and their appurtenant drainage facilities shall be designed in accordance with Uniform Building Code guidelines and the Placer County Grading Ordinance. In general, soil slopes shall be no steeper than 2:1 (horizontal to vertical) unless authorized by a qualified professional. Any deviation from the 2:1 slope standard is subject to review and approval by the Department of Public Works. Slope angles shall be designed to conform to the competence of the material into which they are excavated.</p> <p>(4) Parking facilities, roadway surfaces, and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems shall be designed where possible to divert natural drainage away from structures, to collect water concentrated by these surfaces, and to convey water away</p>	

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<p>from the project site in accordance with the National Pollutant Discharge Elimination System, Storm Drain Standards, and Placer County standards.</p> <p>(5) Where structures are to be constructed between the rock, hardpan or dense soil exposed in a cut slope and engineered fill, a geotechnical study shall be prepared as detailed in Mitigation Measure 3.6-5a, and site specific soil engineering recommendations developed to mitigate this impact.</p> <p>(6) During construction, trenches greater than 5 feet in depth shall be shored, sloped back at a 2:1 slope angle, or be reviewed for stability by a qualified professional in accordance with the Occupational Safety and Health Administration regulations, if personnel are to enter the excavations.</p>	
3.6-6	Increased exposure of people and property to flooding hazards in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.6-7	Adverse impacts on water quality in the Plan area and downstream due to wastewater generated by development in accordance with the proposed FDCP.	PSC	3.6-7a	The County shall modify its Ordinance Governing Individual On-site Sewage Disposal Systems to meet the Regional Board Guidelines for Waste Disposal From Land Developments and submit the adopted FDCP to the Regional Board for review as required under Resolution No. 82-036.	LS
		PSC	3.6-7b	Add the following policy to the FDCP: On-site sewage systems shall participate in the approved County Operation, Maintenance and Monitoring program.	LS
3.6-8	Water quality in the Plan area may be degraded following site development by the introduction of urban pollutants including vehicle oils and greases, heavy metals on roads, parking lots, and driveways, fertilizers and pesticides used on site landscaping, and toxic compounds released from auto maintenance areas. Construction during wet or dry weather will affect water quality with increased sedimentation, operation and maintenance of construction vehicles, and storage of materials that could release contamination to surface waters.	PS	3.6-8a	On-site detention basins shall be designed and constructed with new development as determined to be necessary by the Department of Public Works. These basins shall be constructed at the commencement of grading, and be maintained throughout the construction period to receive stormwater runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Sediment basins located downstream of known development shall be designed to accommodate anticipated sediment deposit that will be transported during subsequent phases of development.	SU

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
		PS	3.6-8b	<p>Prior to approval of improvement plans for development projects in the Plan area, the developers shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain inlet clearing) to reduce long-term surface water quality impacts. Parking lot sweeping shall occur on a weekly basis, and storm drain inlet clearing shall occur semi-annually. The plan shall also include the installation of oil, gas and grease trap separators in the proposed parking lots. The developers shall develop a financial mechanism, to be approved by Placer County, which ensures the long-term implementation of the program.</p> <p>Best management practices (BMPs), such as detention ponds, wetlands, filters, and vegetated swales, have been shown to reduce urban pollutant levels in stormwater. A number of studies have been conducted over the past two decades regarding the pollutant removal effectiveness of urban stormwater BMPs. For example, wetland BMPs such as shallow marshes, extended detention wetlands, and ponded wetlands have demonstrated median removal rates of 77% for bacteria, 90%</p>	SU

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				for hydrocarbons, including oil and grease, and 69% for cadmium. Ponds have demonstrated median removal rates of 57% and 73% for copper and lead, respectively. Filters have been shown to be 81% effective in removing hydrocarbons, including oil and grease, 80% effective in removing zinc, 87% effective in removing total suspended solids (TSS), and 66% effective in removing organic carbon, based on the median rates of a number of reported studies. Drainage swales have demonstrated median removal efficiencies of 81% for TSS, 67% for organic carbon, and 71% for zinc (Schueler 1997). All BMPs for water quality protection, source control, and treatment control shall be developed in accordance with the California Stormwater Quality Association <i>Stormwater Best Management Practice Handbook</i> (January 2003) for the applicable type of development and/or improvement. Provisions shall be included for long-term maintenance of BMPs.	
		PS	3.6-8c	Projects subject to construction-related storm water permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) program shall obtain any required permits through the	SU

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Table S-I
Summary of Impacts and Mitigation Measures
For The Foresthill Divide Community Plan

Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				Regional Water Quality Control Board or Environmental Protection Agency.	
		PS	3.6-8d	Developers shall revegetate all disturbed areas. Revegetation undertaken from April 1 to October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided. It is the developer's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction. Where soil stockpiling or borrow areas are to remain for more than one construction season, proper erosion control measures shall be applied. Erosion control shall be provided where roadside drainage is off of the pavement, to the satisfaction of the Department of Public Works.	SU
		PS	3.6-8e	Prior to approval of improvement plans for projects of 1 acre or greater, the developer shall obtain from the State Water Resources Control Board a General Construction Activity Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of stormwater discharges during construction activities.	LS
		PS	3.6-8f	Prior to approval of improvement plans for all projects in the Plan area, the project developer	LS

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<p>shall submit to the Placer County Public Works Department, for review and approval, an erosion control plan consistent with the County's Grading, Erosion and Sediment Control Ordinance during environmental review. The erosion control plan shall indicate that proper control of siltation, sedimentation and other pollutants will be implemented per NPDES permit requirements and County ordinance standards. The plan shall address storm drainage during construction and proposed BMPs (Best Management Practices) to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to Placer County specifications. BMPs shall be implemented throughout the construction process.</p> <p>Best Management Practices for construction shall be developed in accordance with the California Stormwater Quality Association <i>Stormwater Best Management Practice Handbook</i> (January 2003).</p>	
3.6-9	Reduction in available surface and ground water supplies due to development in accordance with the proposed FDCP.	LS		None required.	

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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.6-10	Adverse impacts on special-status plants in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-11	Adverse impacts on special-status avian species in the Plan area due to development in accordance with the proposed FDCP.	PS	3.6-11	If any or all of the special-status avian species listed in Impact 3.6-11 are found actively nesting within an area proposed for development within the Plan area, no construction activities shall occur within 500 feet of the nest location. Construction activities may resume within this buffer zone after the young have fledged from the nest and the nest is abandoned for that breeding season.	LS
3.6-12	Adverse impacts on special-status mammal species in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-13	Adverse impacts on special-status amphibian species in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-14	Adverse impacts on special-status fish species in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-15	Adverse impacts on special-status invertebrate species in the Plan area	LS		None required.	

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Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
	due to development in accordance with the proposed FDCP.				
3.6-16	Adverse impacts on jurisdictional waters of the United States in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.6-17	Adverse impacts on riparian habitat in the Plan area due to development in accordance with the proposed FDCP.	PSU		None available.	PSU
3.6-18	Adverse impacts on wildlife movement corridors/deer migration corridors in the Plan area due to development in accordance with the proposed FDCP.	PSU		None available.	PSU
3.6-19	Cumulative adverse impacts on common resident and migratory wildlife species in the Plan area due to development in accordance with the proposed FDCP.	LS		None required.	
3.7 Cultural Resources					
3.7-1	Direct impacts on prehistoric and historic sites within the Plan area due to ground-disturbing activities associated with development in accordance with the FDCP.	LS		None required.	

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Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
3.7-2	Indirect impact on prehistoric and historic sites in the Plan area due to increased public access into an area containing a site, which could result in vandalism. Indirect impacts that could occur if development introduces incompatible visual or audible elements into the setting of a potentially significant resource.	LS		None required.	
3.8 Air Quality					
3.8-1	New stationary and mobile sources of air pollutants caused by buildout of the proposed FDCP will result in increased emissions of ROG, NO _x , CO and PM ₁₀ .	SCU		None feasible.	
3.8-2	Construction activities associated with development under the proposed FDCP will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations.	PSCU		None available.	
3.8-3	Implementation of the proposed FDCP could result in placement of sensitive land uses near potential sources of	LS		None required.	

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Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
	objectionable odors, dust, or toxic air contaminants.				
3.8-4	Emission of pollutants from wood-burning appliances associated with residential uses.	LS		None required.	
3.9 Transportation and Circulation					
3.9-1	Increased traffic throughout the Community Plan area due to development in accordance with the FDCP.	PS	3.9-1a	Traffic mitigation fees shall be adopted for new development in the Plan area that are sufficient to fund roadway improvements necessary to maintain the Level of Service established by the FDCP, including new roadway segments and additional passing lanes on Foresthill Road.	LS
		PS	3.9-1b	A center two-way left turn on Foresthill Rd. from the Todd's Valley area through the Core Area shall be installed, as it will improve traffic flow during peak periods. This center two-way left turn will improve safety by providing left turning motorists a refuge area to wait for the next available gap out of the through traffic flow on Foresthill Road, thus allowing through traffic to continue its progression.	LS
		PS	3.9-1c	At such time as they are warranted, traffic signals shall be installed on Foresthill Road at the following locations: <ul style="list-style-type: none"> • Spring Garden Road 	LS

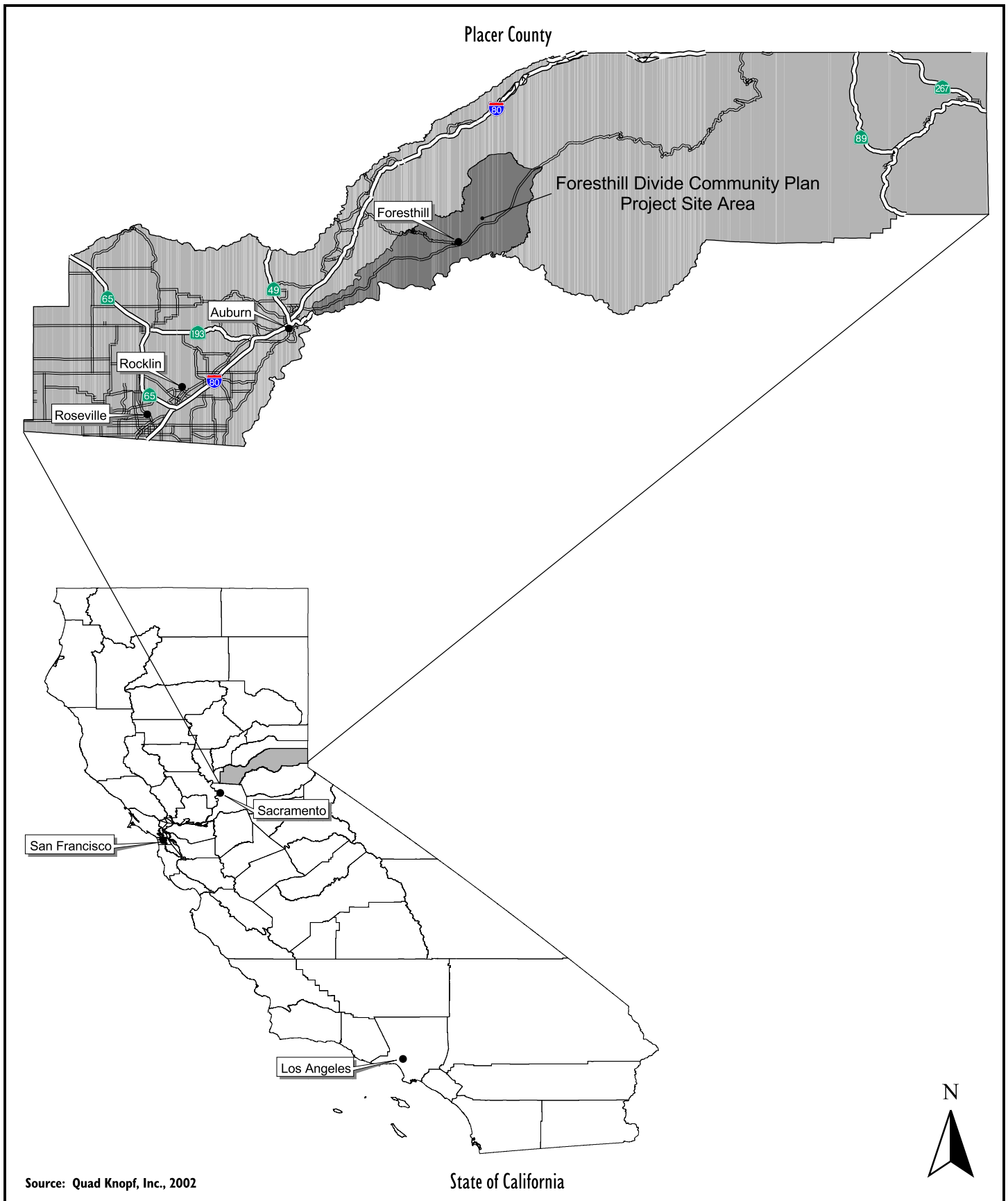
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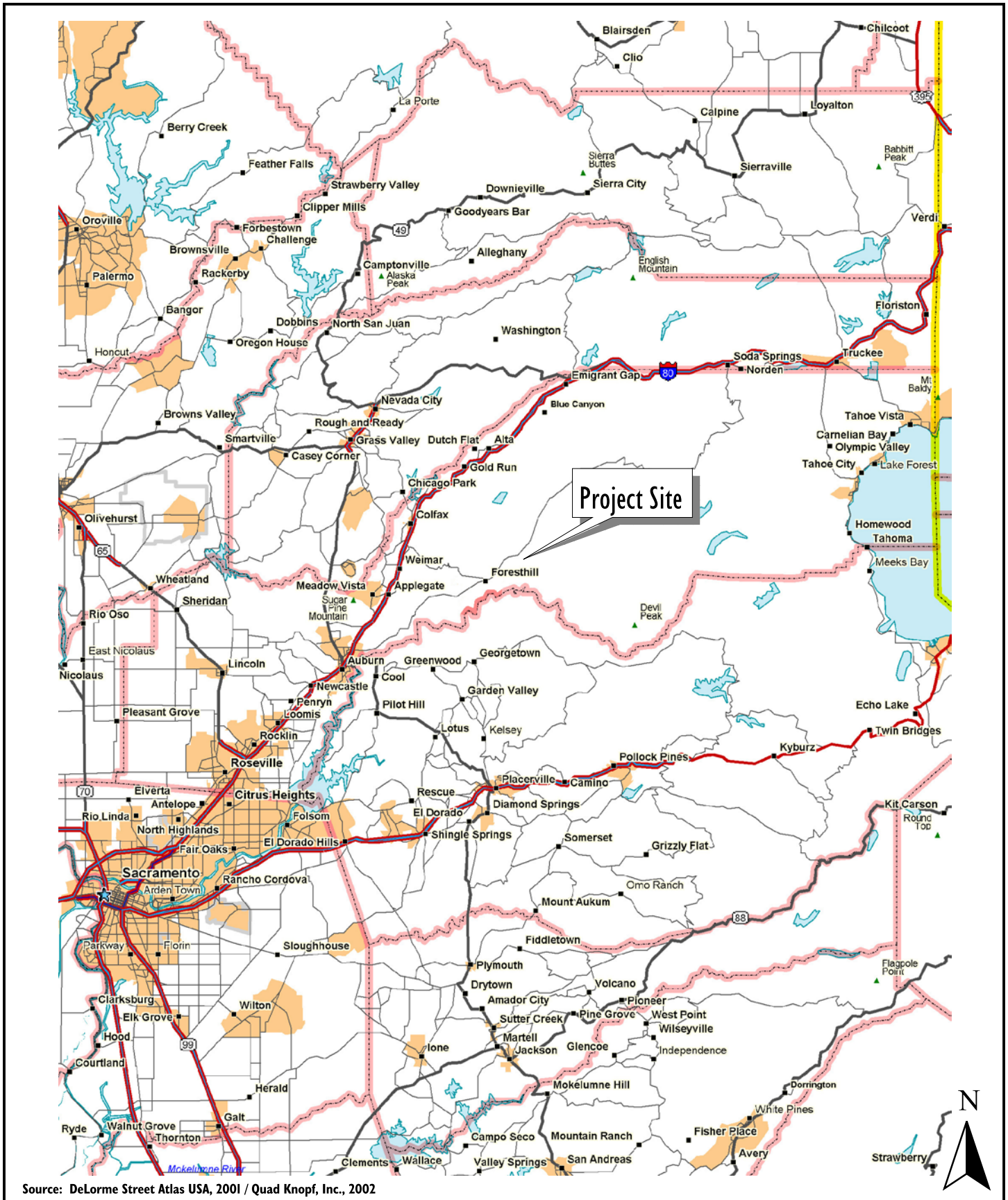
Table S-1 Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
				<ul style="list-style-type: none"> Todd Valley Road (W) Spring Garden Connection (Power Line Road) Signal control mechanisms that minimize the delay of through traffic should be utilized, especially during non-commute hours.	
3.9-2	Potential decrease in Level of Service at key intersections at the I-80/Auburn Ravine Road/Foresthill Road interchange due to increased traffic in the Community Plan area.	LS		None required.	
3.9-3	Potential decrease in Level of Service at key intersections at the I-80/Auburn Ravine Road/Foresthill Road interchange due to increased traffic in the Community Plan under Cumulative + Project conditions.	LS		None required.	
3.10 Noise					
3.10-1	Noise impacts due to increased roadway traffic in the Plan area.	PS	3.10-1a	Use of Setbacks.	LS
		PS	3.10-1b	Use of Barriers.	LS
		PS	3.10-1c	Site Design.	LS
		PS	3.10-1d	Building Design.	LS
		PS	3.10-1e	Noise Reduction by Building Facades.	LS
		PS	3.10-1f	Use of Vegetation.	LS
3.10-2	Noise impacts due to the introduction	PS	3.10-2a	Same as 3.10-1a through 3.10-1f	LS

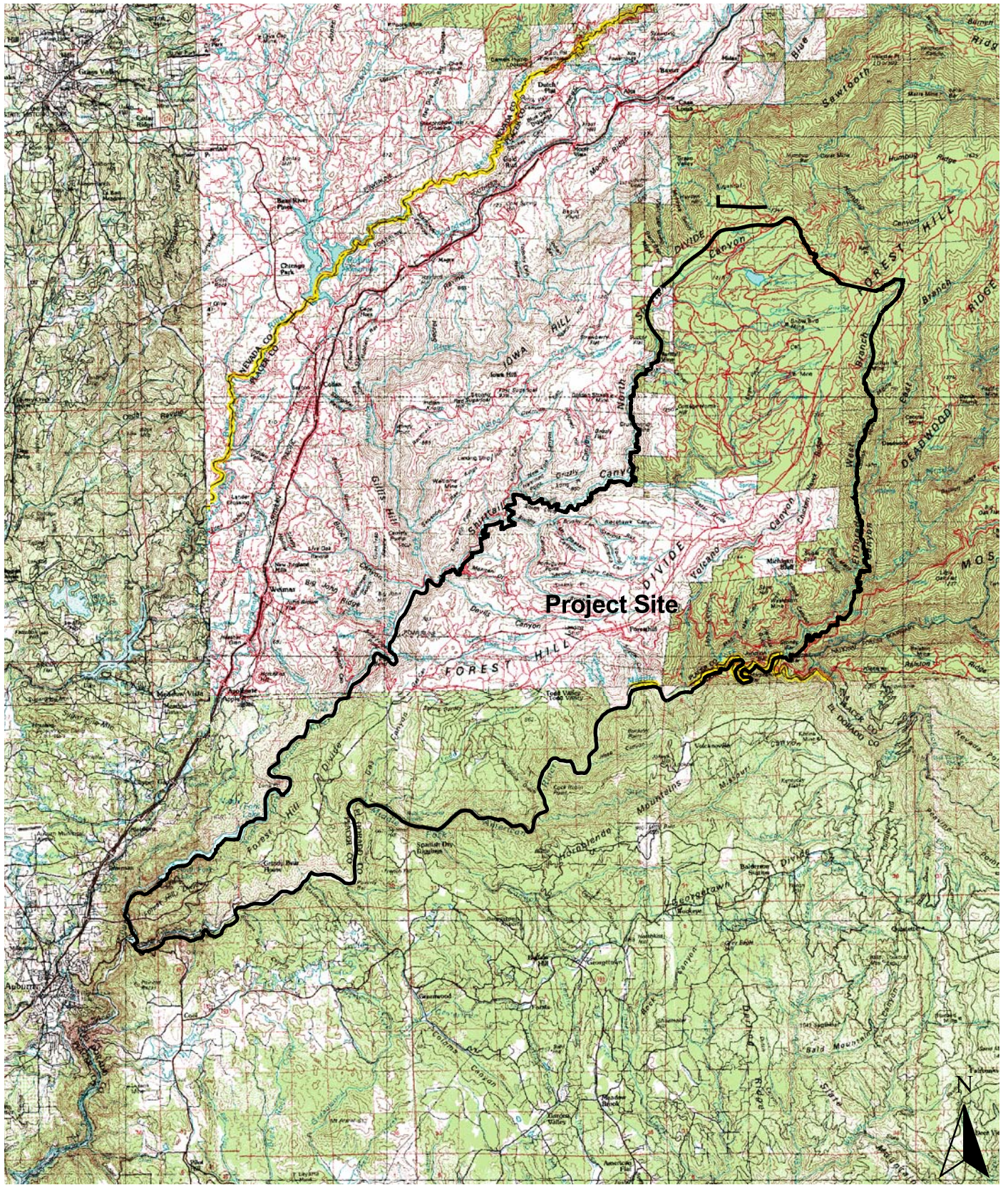
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Table S-I Summary of Impacts and Mitigation Measures For The Foresthill Divide Community Plan					
Impact #	Impact	Significance	Mitigation #	Mitigation Measure	Significance After Mitigation
	of additional stationary noise sources in the Plan area.		through 3.10-2f		
3.10-3	Interior noise impacts for all sources within the Plan area.	PS	3.10-3a through 3.10-3f	Same as 3.10-1a through 3.10-1f.	LS
3.10-4	Noise from construction-related activities in the Plan area may exceed adopted noise standards.	PS	3.10-4	The hours of operation of noise-producing construction equipment shall be restricted to 7:00 a.m. to 7:00 p.m. Mondays through Fridays, and 9:00 a.m. to 6:00 p.m. on Saturdays and Sundays. Effective mufflers shall be fitted to gas- and diesel- powered equipment to reduce noise levels as much as possible.	LS

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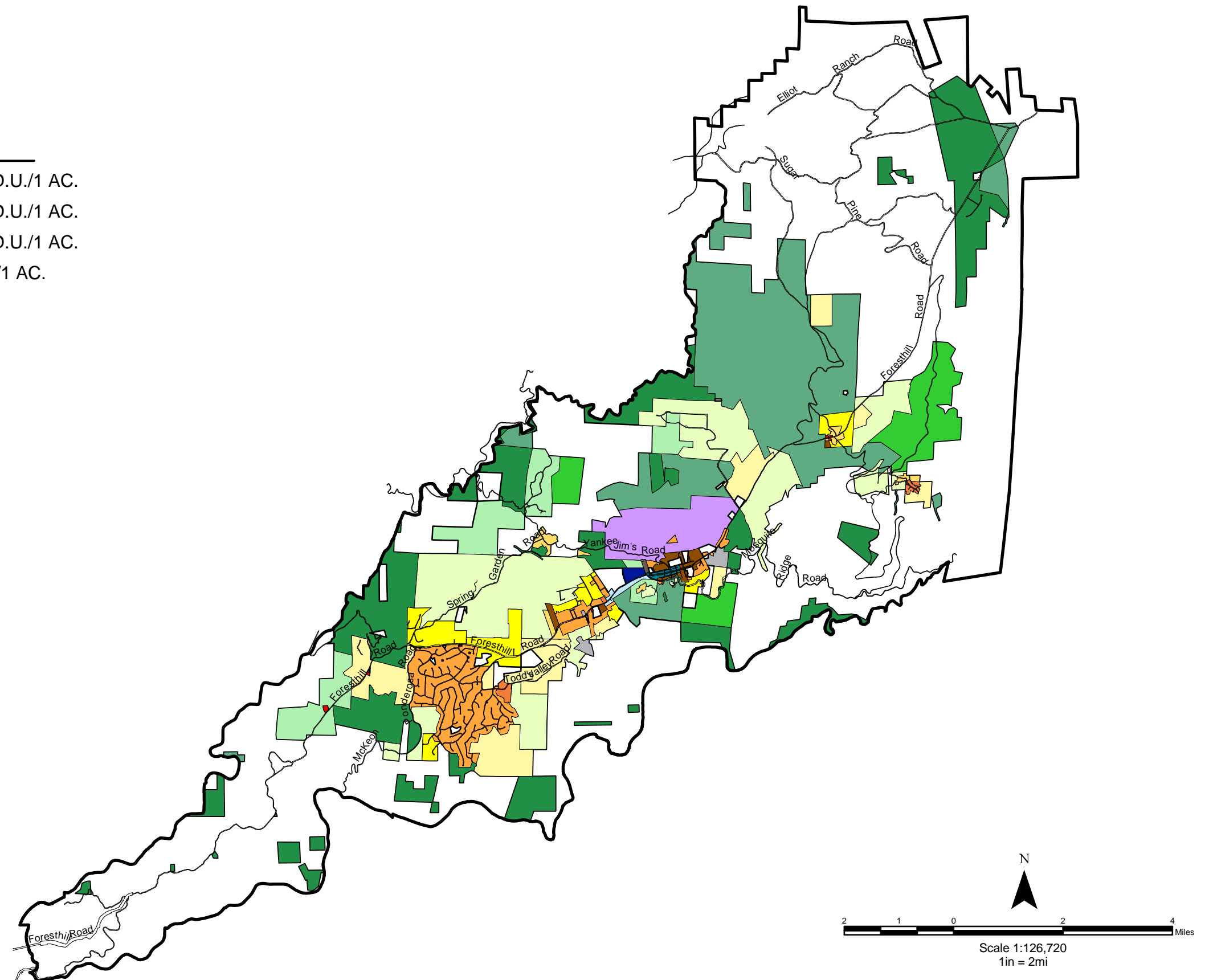


Source: Quad Knopf, Inc., 2002

Legend

- MEDIUM DENSITY RESIDENTIAL 8 D.U./1 AC.
- MEDIUM DENSITY RESIDENTIAL 6 D.U./1 AC.
- MEDIUM DENSITY RESIDENTIAL 4 D.U./1 AC.
- LOW DENSITY RESIDENTIAL 1 D.U./1 AC.
- RURAL RESIDENTIAL 1 D.U./2.3 AC.
- RURAL RESIDENTIAL 1 D.U./4.6 AC.
- RURAL RESIDENTIAL 1 D.U./10 AC.
- AG/TIMBERLAND 1 D.U./20 AC.
- AG/TIMBERLAND 1 D.U./40 AC.
- AG/TIMBERLAND 1 D.U./80 AC.
- AG/TIMBERLAND 1 D.U./160 AC.
- FORESTRY 160 AC. MIN.
- CANYON MIXED USE
- DOWNTOWN MIXED USE
- MILL SITE MIXED USE
- COMMERCIAL
- DEVELOPMENT RESERVE
- INDUSTRIAL
- PUBLIC

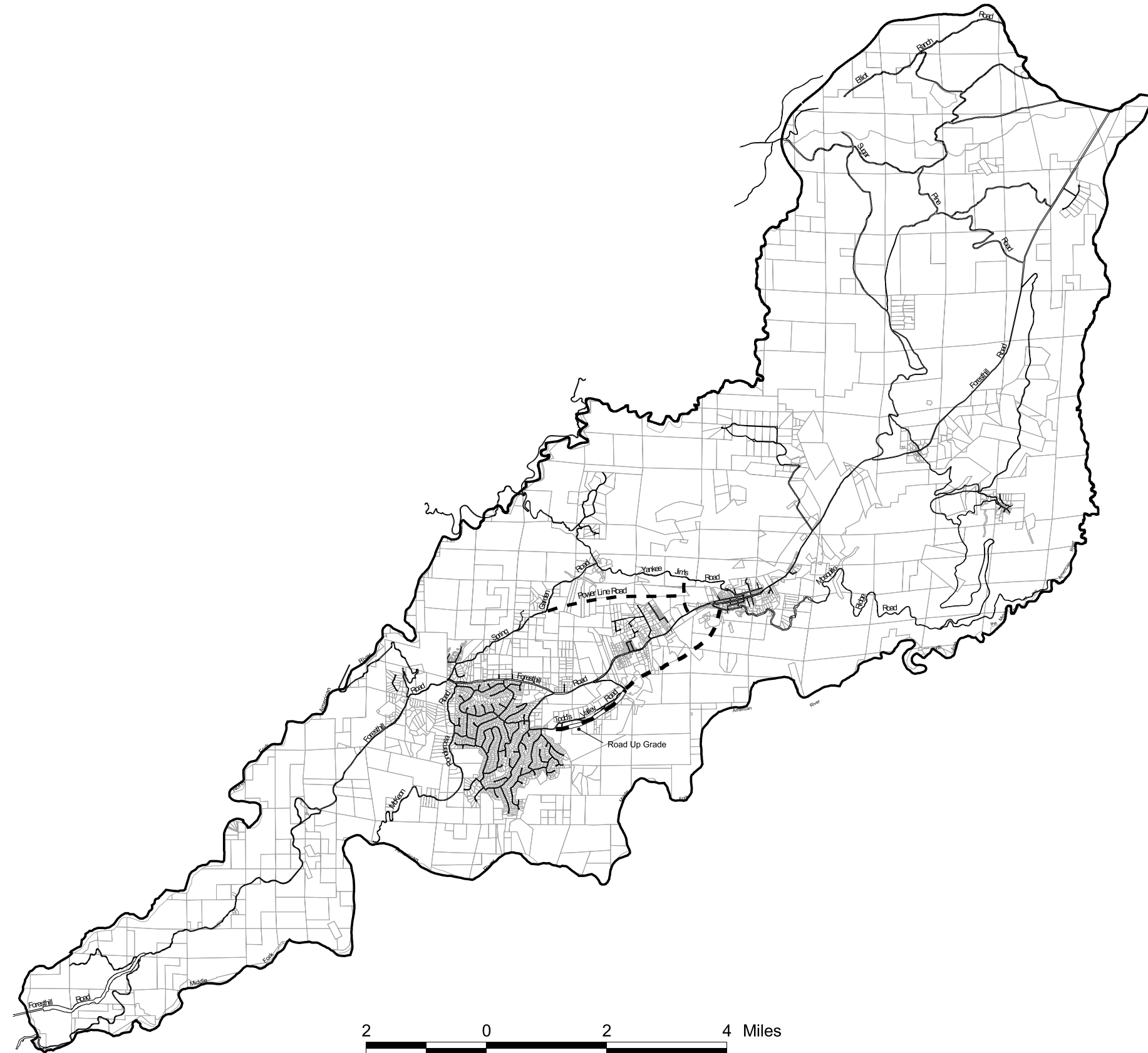
Note: A full size map is available for inspection at the Placer County Planning Department.



Source: Foresthill Community Plan, Quad Knopf, Inc. 2003.

LEGEND

- Project Boundary
- Existing Roads
- Proposed Roads
- Road Up Grade



Source: Placer County Planning Department, 2002 / Quad Knopf, Inc., 2002

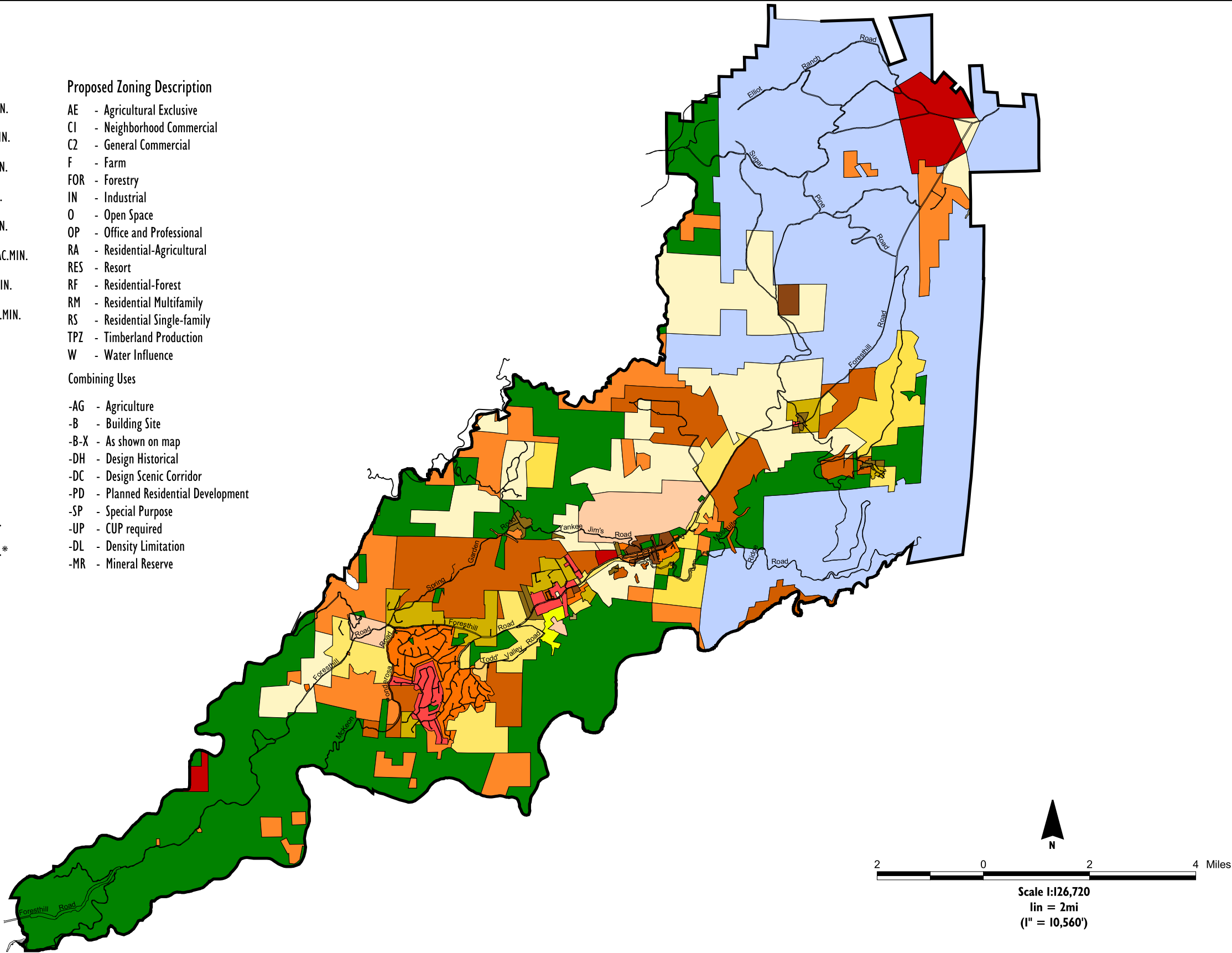
Legend

Proposed Zoning Designation			Proposed Zoning Description		
<div></div>	C-1-DC	<div></div>	RF-B-X 20 AC.MIN.	AE	- Agricultural Exclusive
<div></div>	C-2-DH	<div></div>	RF-B-X 4.6 AC.MIN.	C1	- Neighborhood Commercial
<div></div>	CANYON MIXED USE (C-2-DC/RS-DC)	<div></div>	RF-B-X 40 AC.MIN.	C2	- General Commercial
<div></div>	DOWNTOWN MIXED USE (C-1-DH/RS-DH)	<div></div>	RF-B-X 5 AC.MIN.	F	- Farm
<div></div>	F-UP	<div></div>	RF-B-X 80 AC.MIN.	FOR	- Forestry
<div></div>	FOR-B-X 160 AC.MIN.	<div></div>	RF-MR-B-X 160 AC.MIN.	IN	- Industrial
<div></div>	IN-DC	<div></div>	RF-SP-B 20 AC.MIN.	O	- Open Space
<div></div>	IN-DC-SP	<div></div>	RF-SP-B-X 20 AC.MIN.	OP	- Office and Professional
<div></div>	IN-UP-DC	<div></div>	RM-DL 4	RA	- Residential-Agricultural
<div></div>	MILL MIXED USE (INP-DC)	<div></div>	RM-DL 6	RES	- Resort
<div></div>	MIXED USE	<div></div>	RM-DL 8	RF	- Residential-Forest
<div></div>	O	<div></div>	RS-AG-B-40	RM	- Residential Multifamily
<div></div>	OP-DC	<div></div>	RS-B-40	RS	- Residential Single-family
<div></div>	RF	<div></div>	RS-B-43	TPZ	- Timberland Production
<div></div>	RF-B-100	<div></div>	RS-B-X 1 AC.MIN.	W	- Water Influence
<div></div>	RF-B-43	<div></div>	RS-B-X 1 AC.MIN.*	Combining Uses	
<div></div>	RF-B-X 1 AC.MIN.*	<div></div>	RS-DH	-AG	- Agriculture
<div></div>	RF-B-X 10 AC.MIN.	<div></div>	TPZ	-B	- Building Site
<div></div>	RF-B-X 160 AC.MIN.	<div></div>	TPZ-DR	-B-X	- As shown on map
				-DH	- Design Historical
				-DC	- Design Scenic Corridor
				-PD	- Planned Residential Development
				-SP	- Special Purpose
				-UP	- CUP required
				-DL	- Density Limitation
				-MR	- Mineral Reserve

NOTE:
Setbacks: Front = 20' Sides = 15' total, min. 5' (one story)
7.5' (two stories or more)
Rear: 10' (one story), 20' (two stories)

If currently approved tentative maps are not recorded,
the PD density shall revert to 0.025 when the
tentative maps expire.

A full size map is available for inspection at the Placer County Planning Department

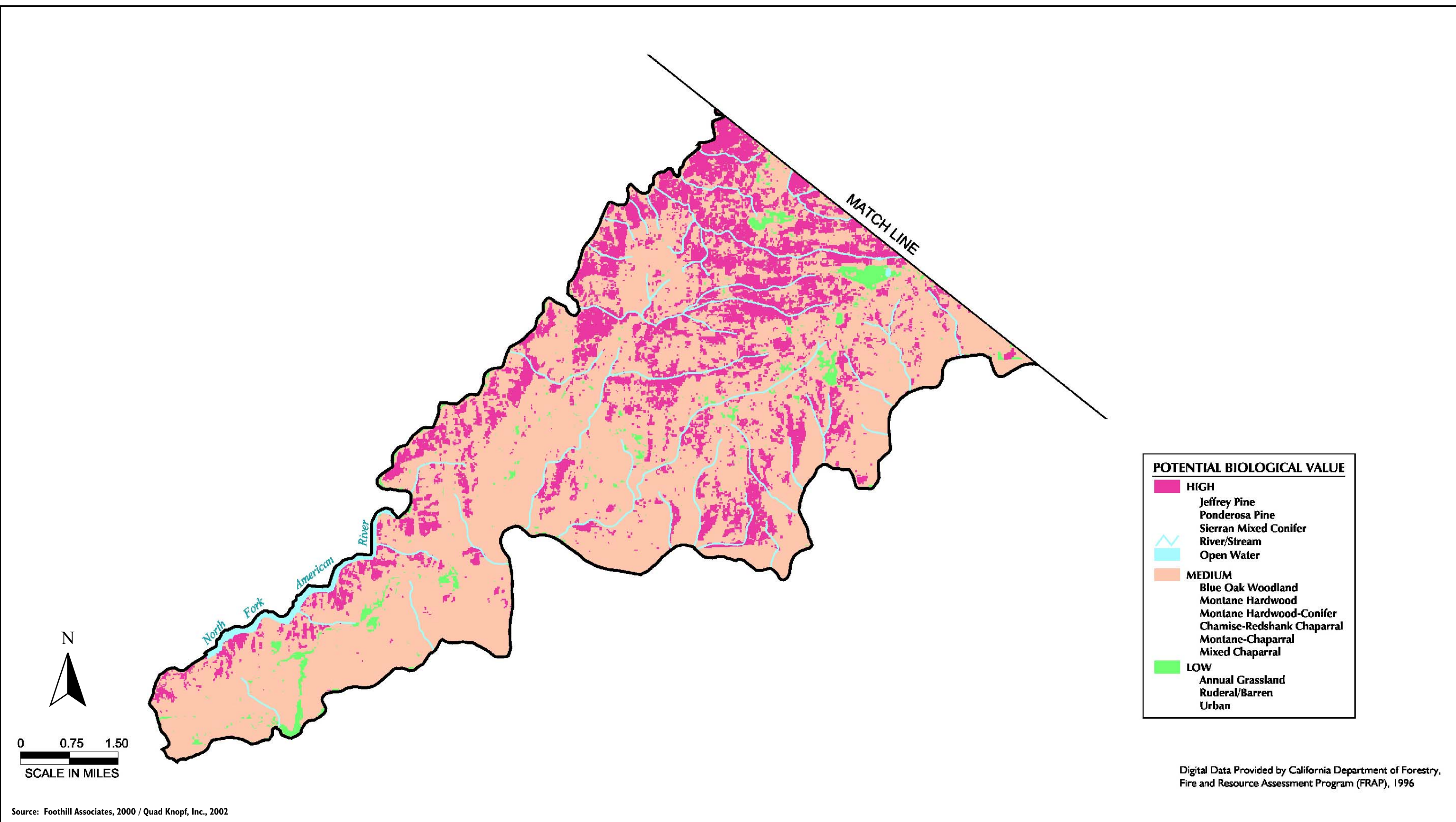


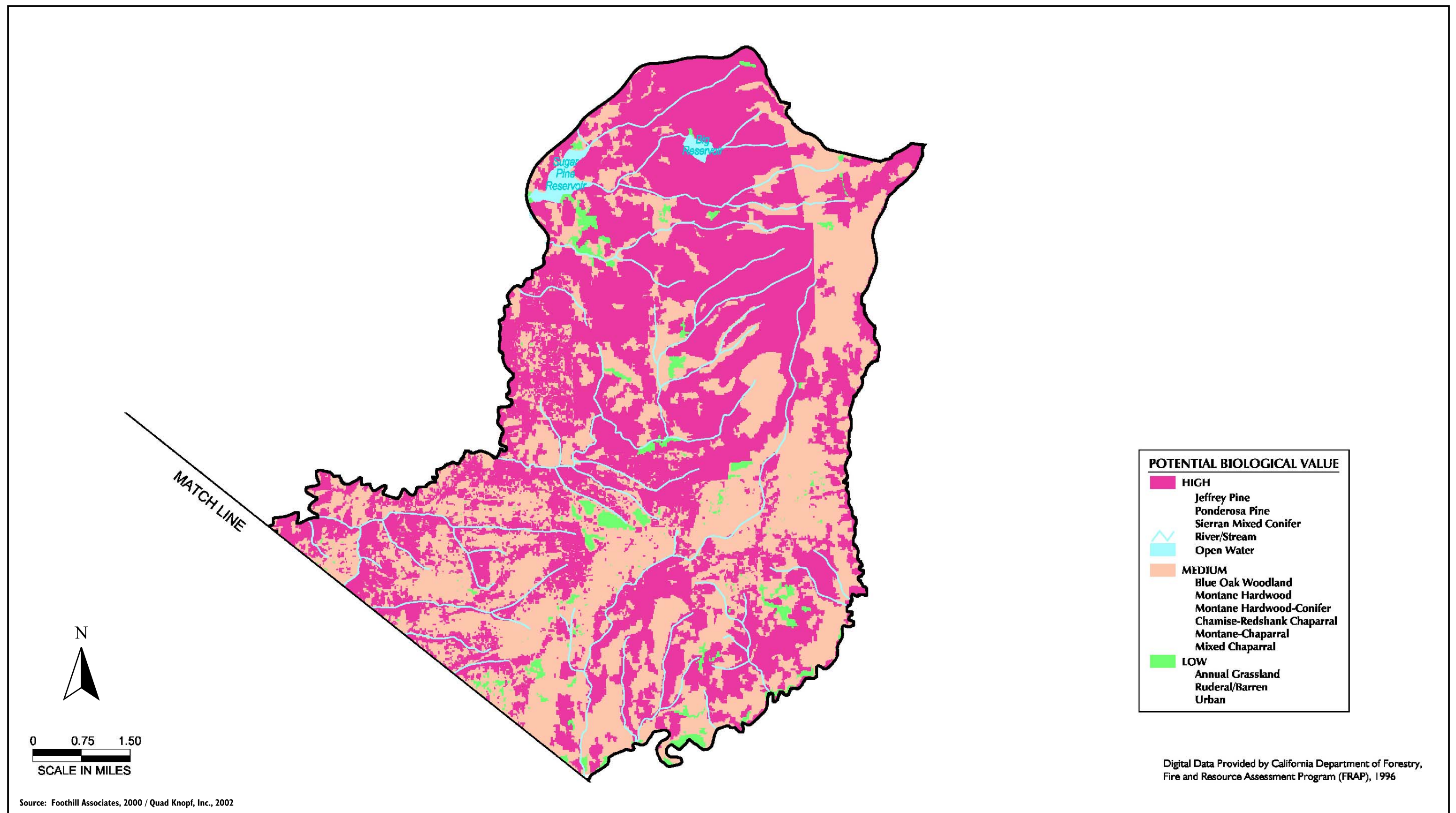
Source: Placer County Planning Department, 2003 / Quad Knopf, Inc., 2003

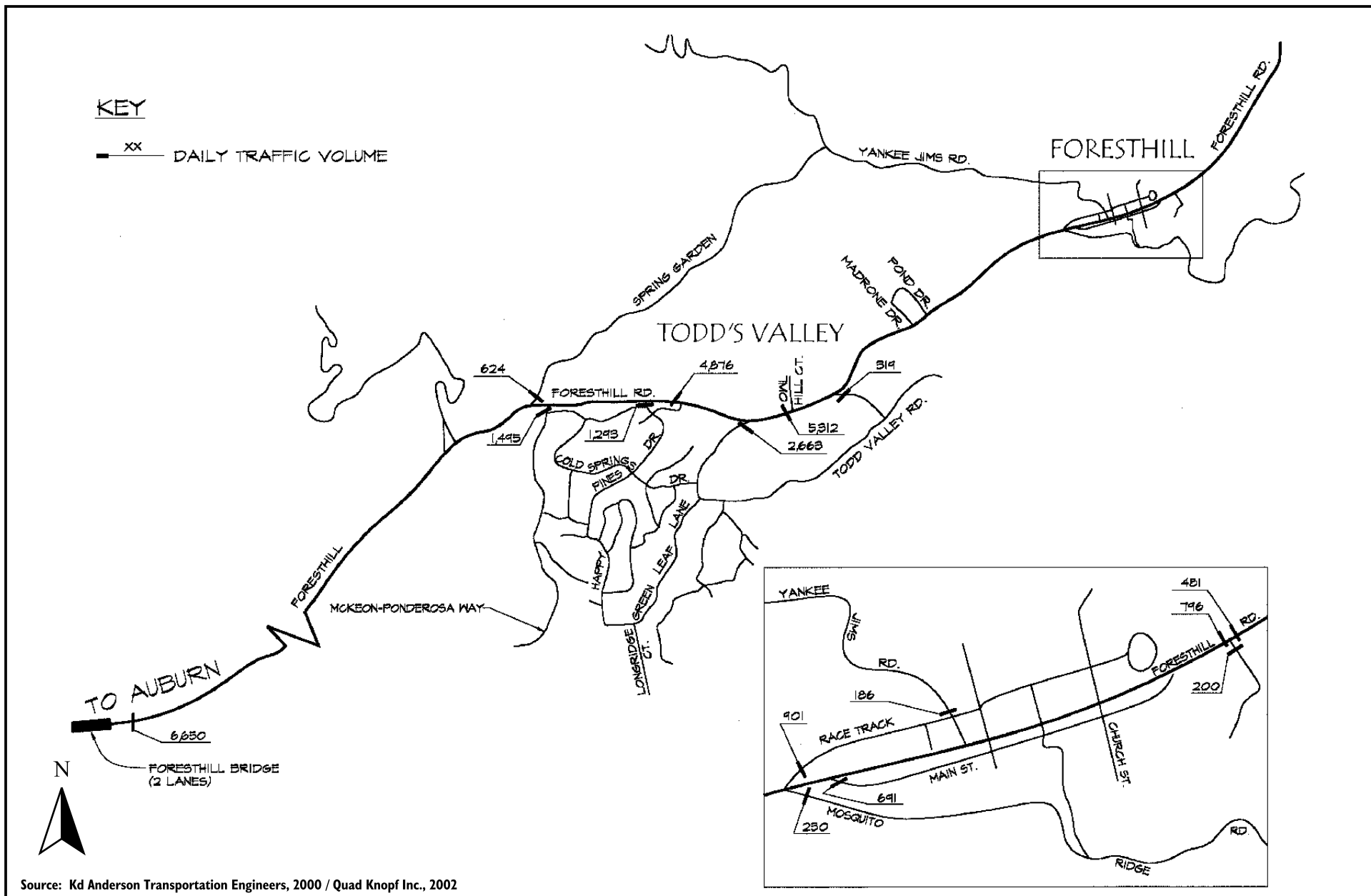


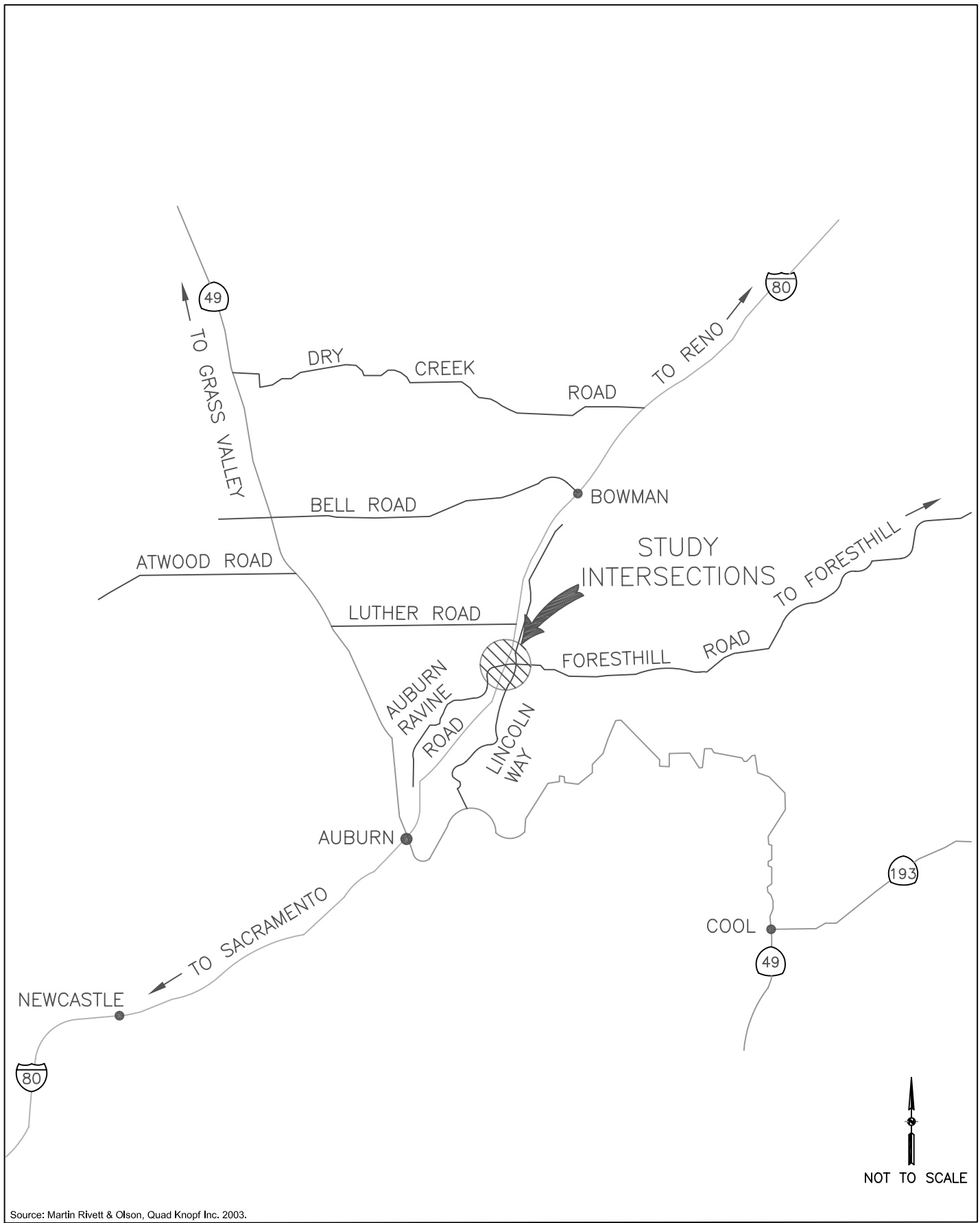
FORESTHILL DIVIDE COMMUNITY PLAN EIR
Proposed Zoning

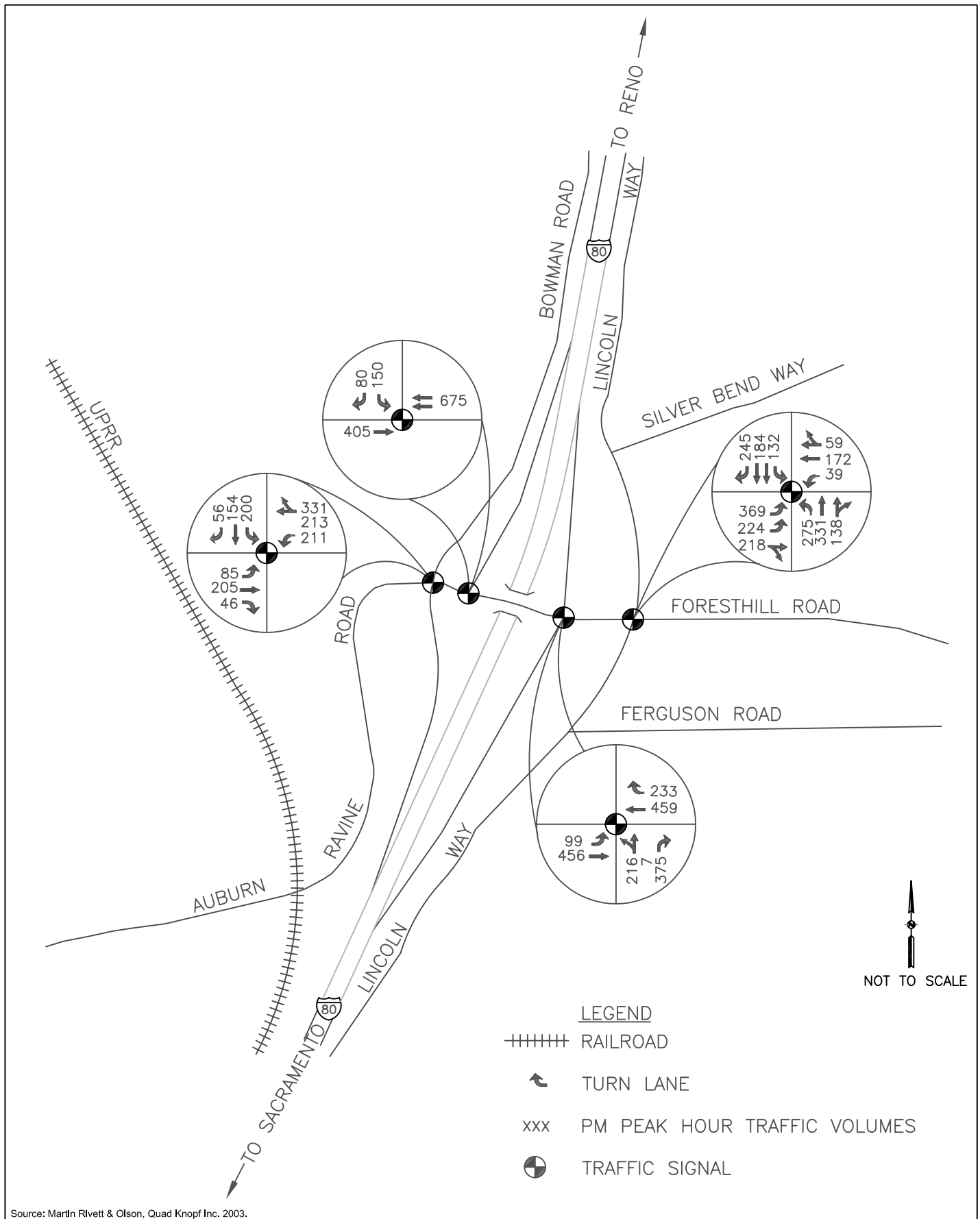
Figure 2-6











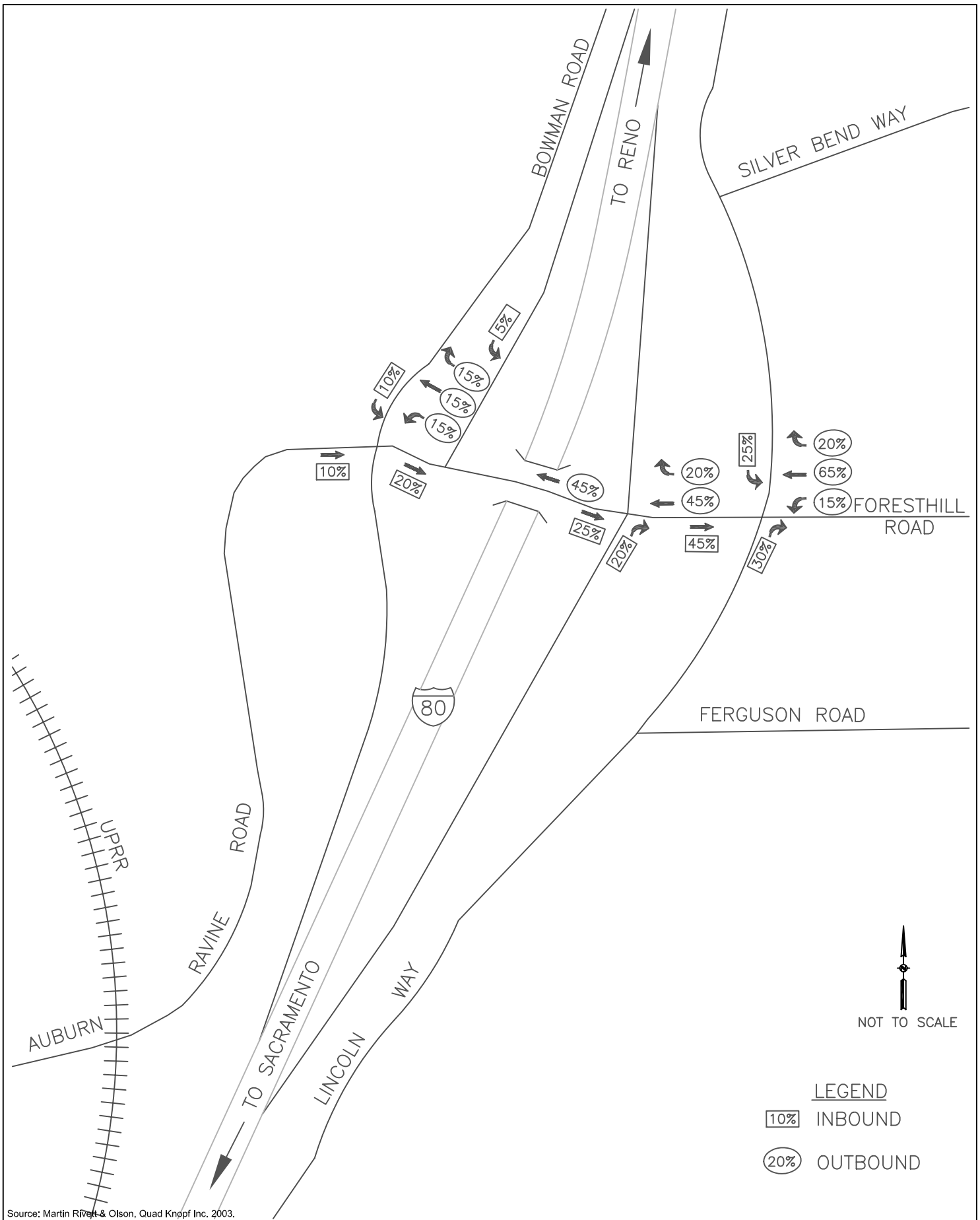
Source: Martin Rivett & Olson, Quad Knopf Inc. 2003.

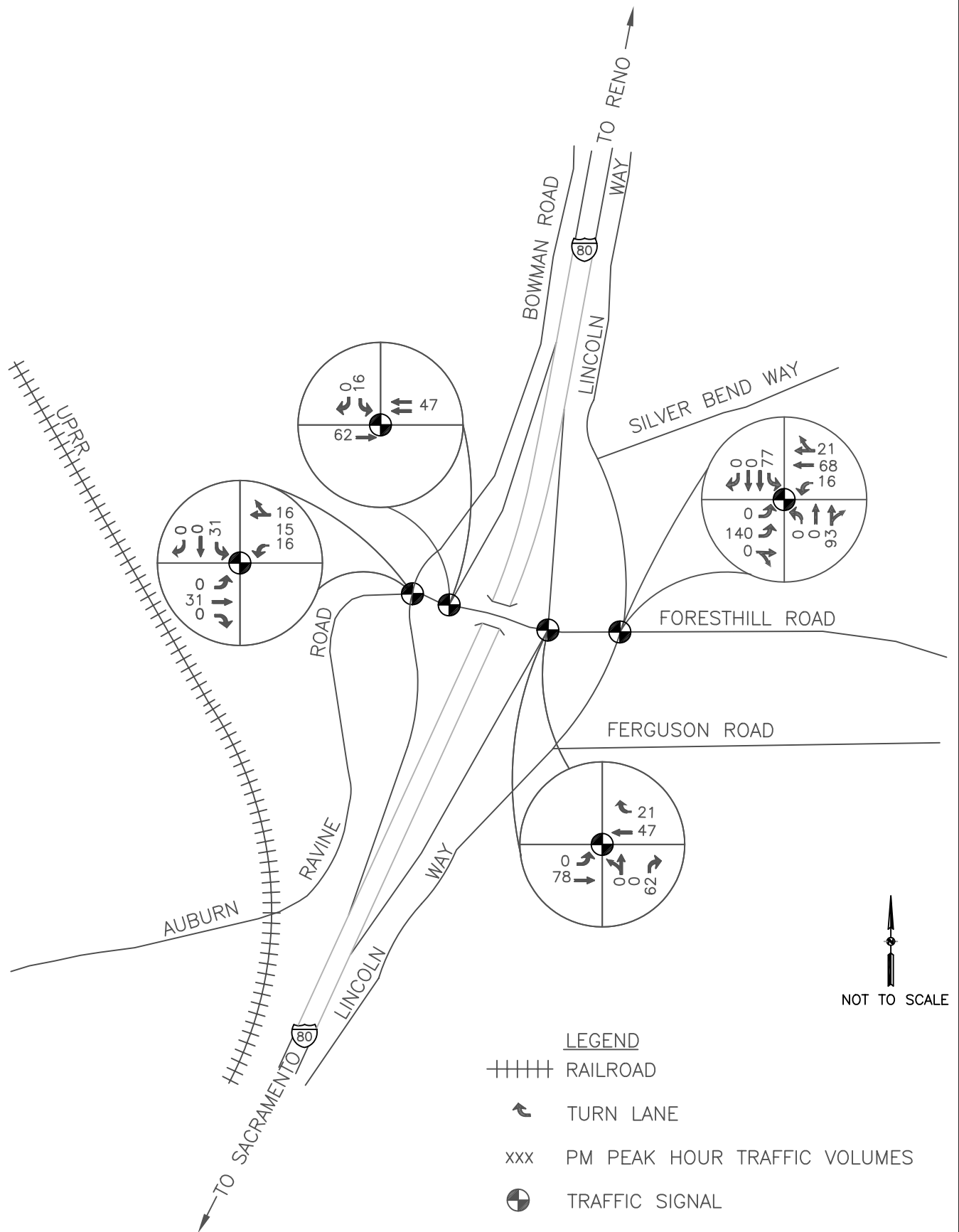


FORESTHILL DIVIDE COMMUNITY PLAN EIR **PM Peak Hour Traffic Volumes** **Existing Conditions**

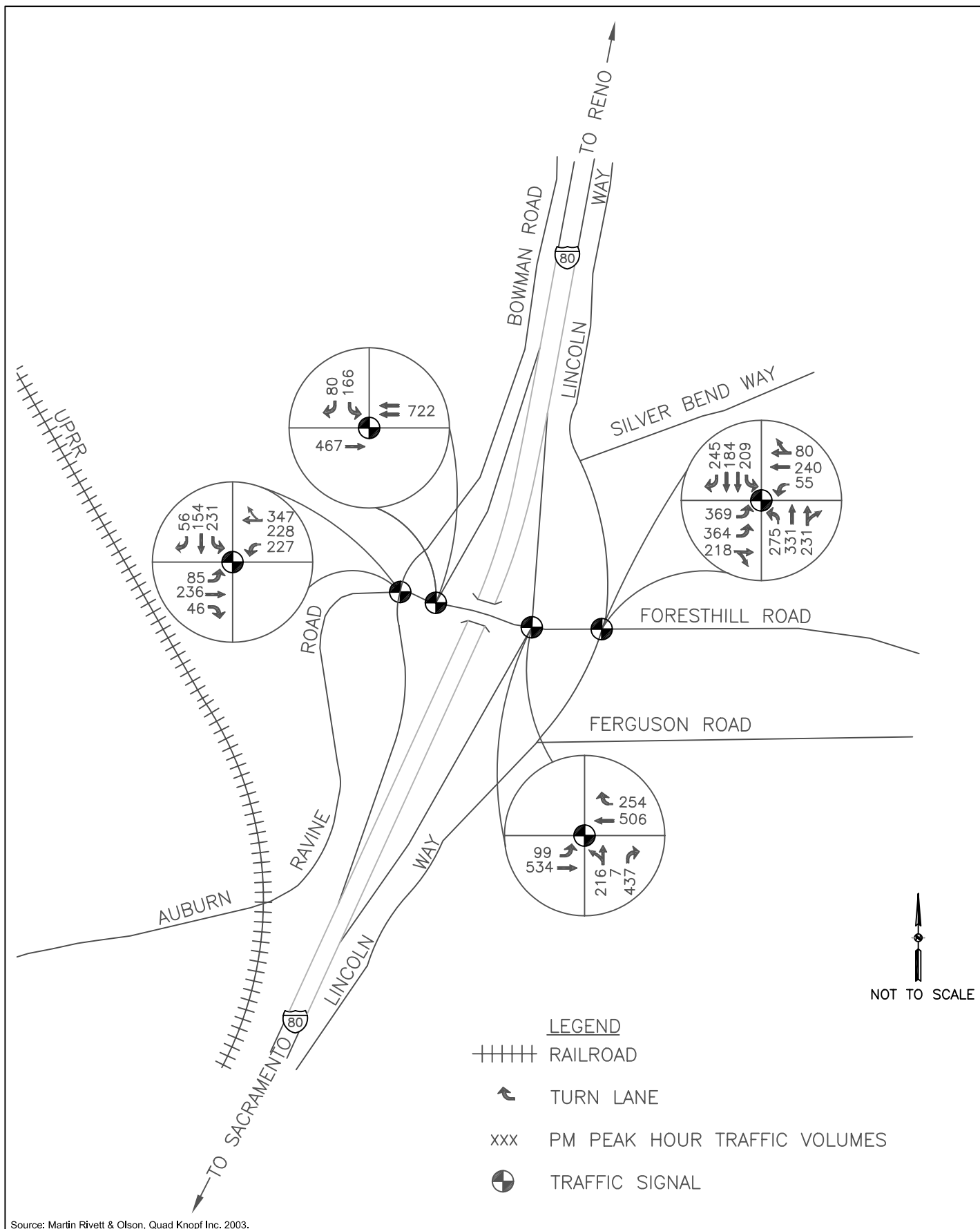
Figure 3.9-3



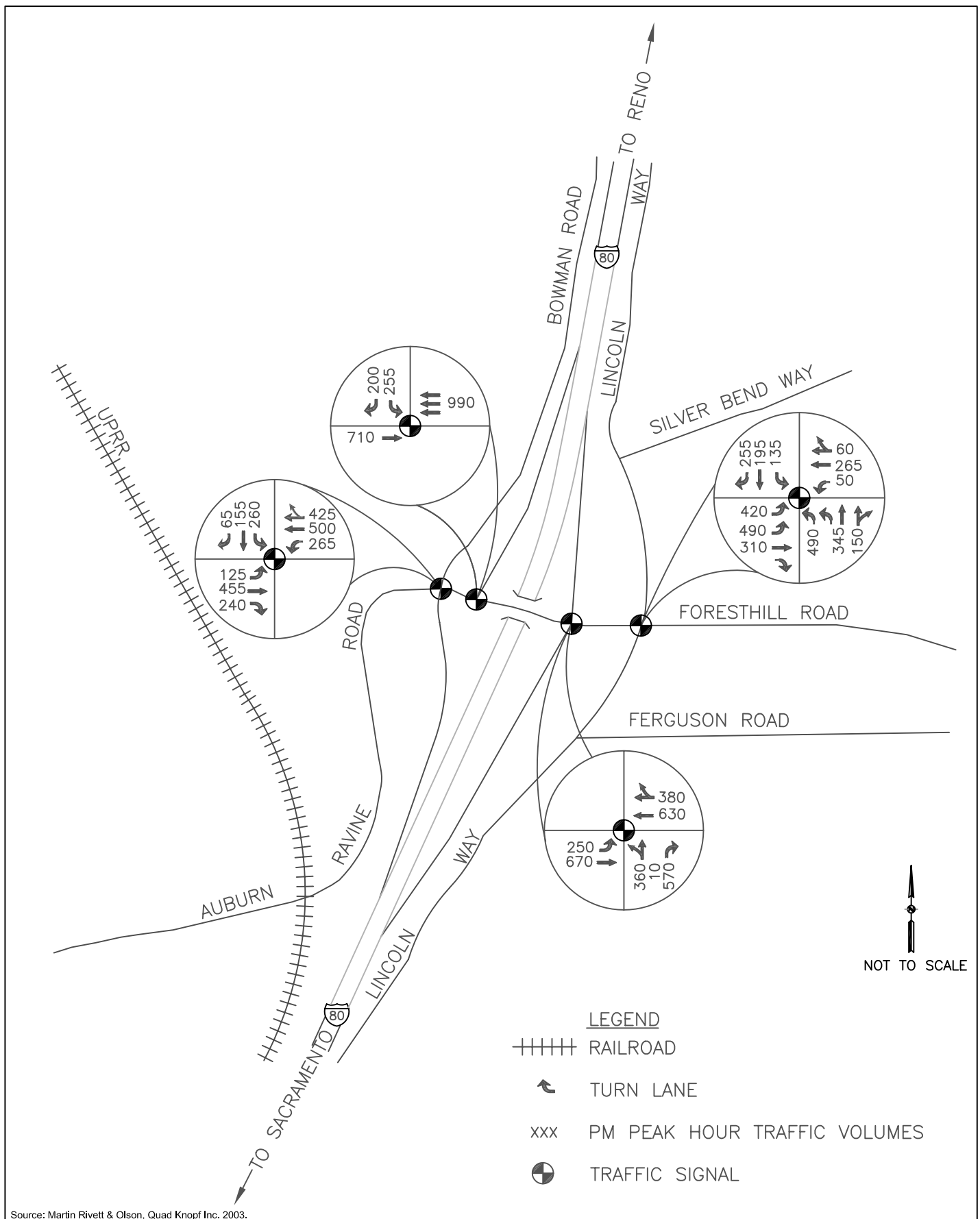




Source: Martin Rivett & Olson, Quad Knopf Inc. 2003.



Source: Martin Rivett & Olson, Quad Knopf Inc. 2003.

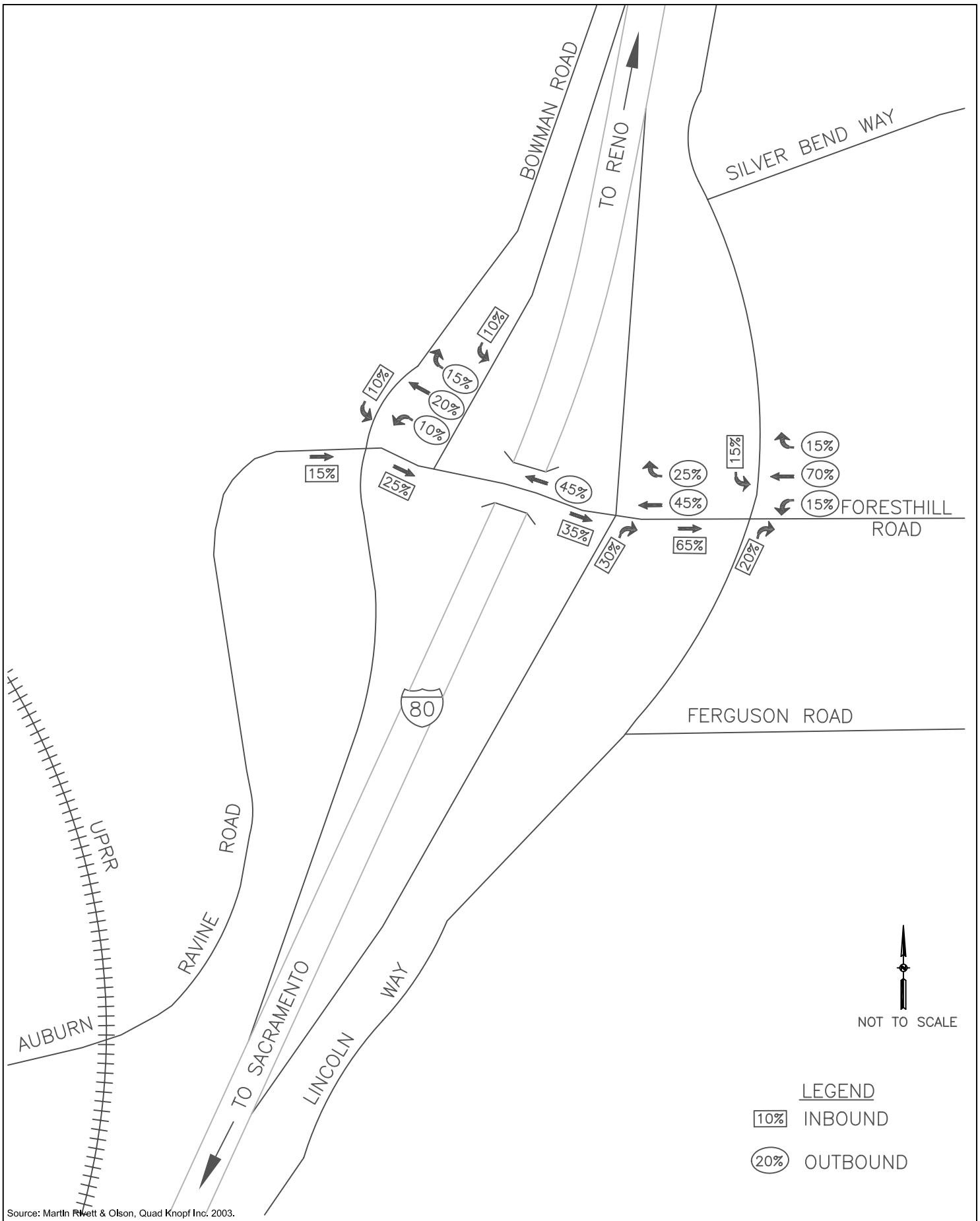


Source: Martin Rivett & Olson, Quad Knopf Inc. 2003.



FORESTHILL DIVIDE COMMUNITY PLAN EIR **PM Peak Hour Traffic Volumes** **Cumulative No Project Conditions**

Figure 3.9-8

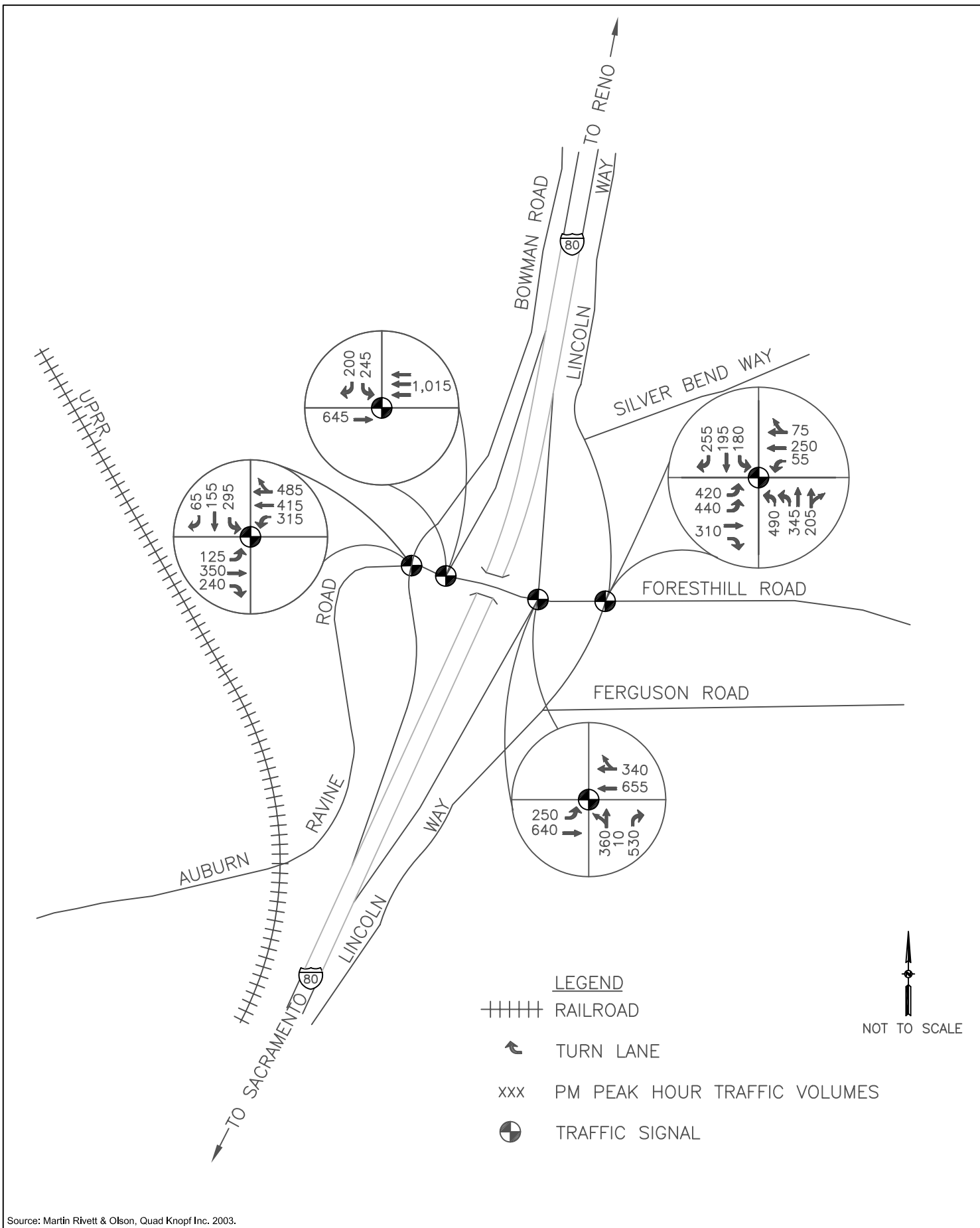


FORESTHILL DIVIDE COMMUNITY PLAN EIR

Project Trip Distribution

Cumulative Conditions

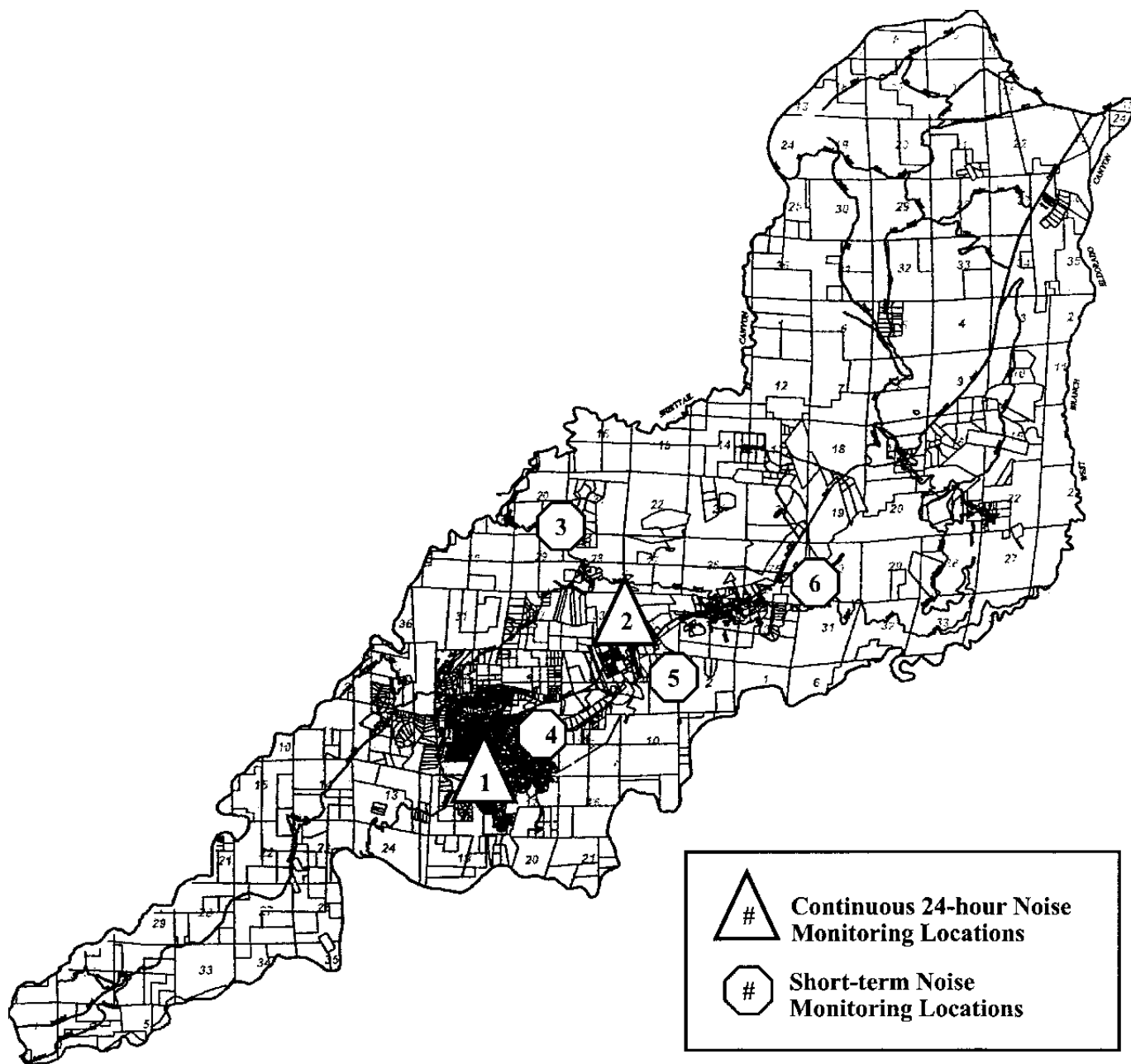
Figure 3.9-9



Source: Martin Rivett & Olson, Quad Knopf Inc. 2003.

FORESTHILL DIVIDE COMMUNITY PLAN EIR
PM Peak Hour Traffic Volumes
Cumulative + Project Conditions

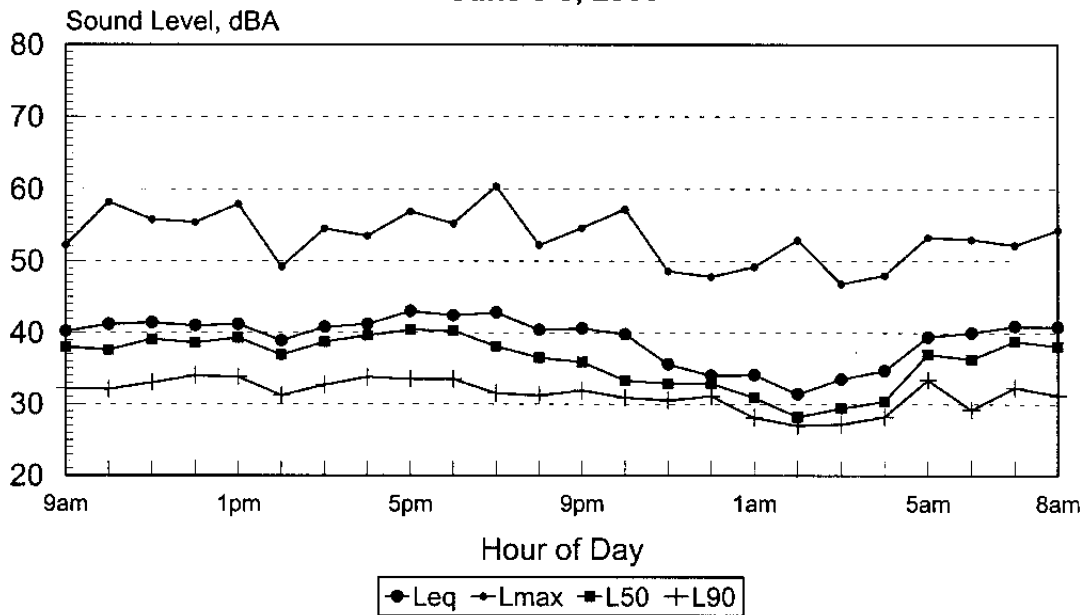
Figure 3.9-10



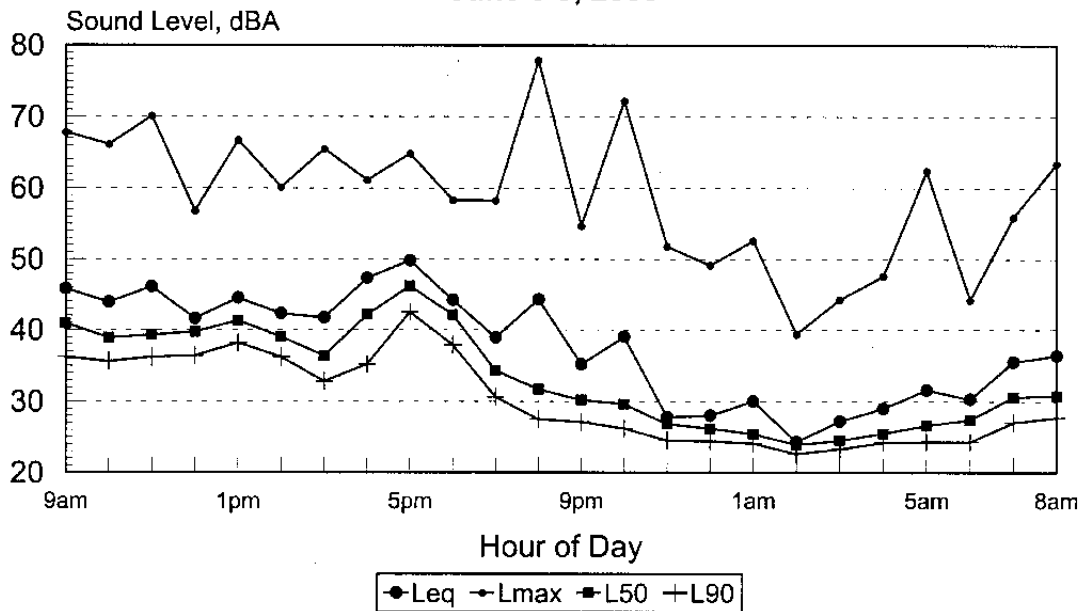
Source: Bollard & Brennan, 2000 / Quad Knopf, Inc., 2002



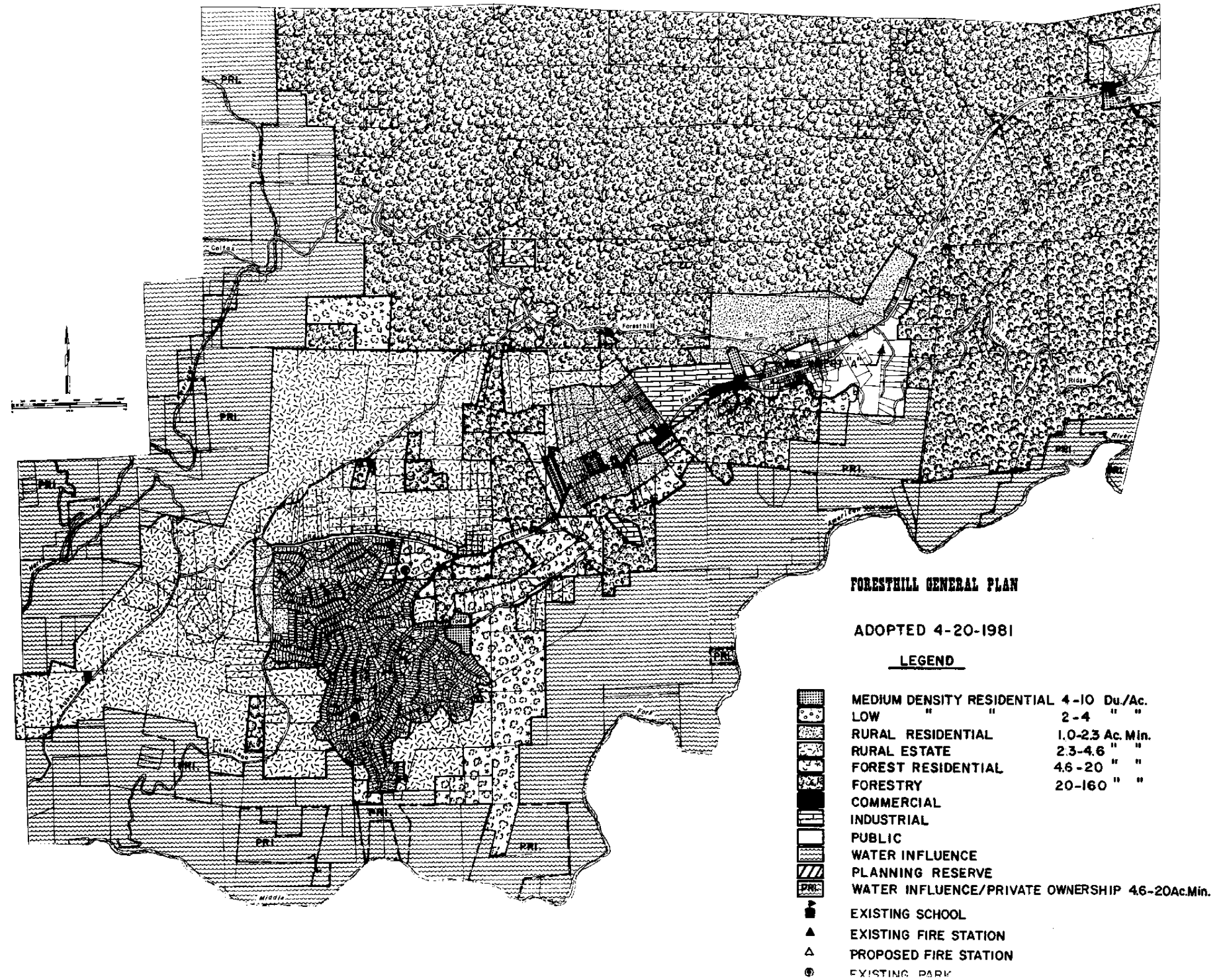
Site 1 - Todd Valley
Continuous 24-Hour Noise Measurement Results
June 8-9, 2000



Site 2 - Forest Hill
Continuous 24-Hour Noise Measurement Results
June 8-9, 2000



Source: Bollard & Brennan, 2000 / Quad Knopf, Inc., 2002




















Source: Foresthill General Plan and EIR, April 1981 / Quad Knopf, Inc., 2002

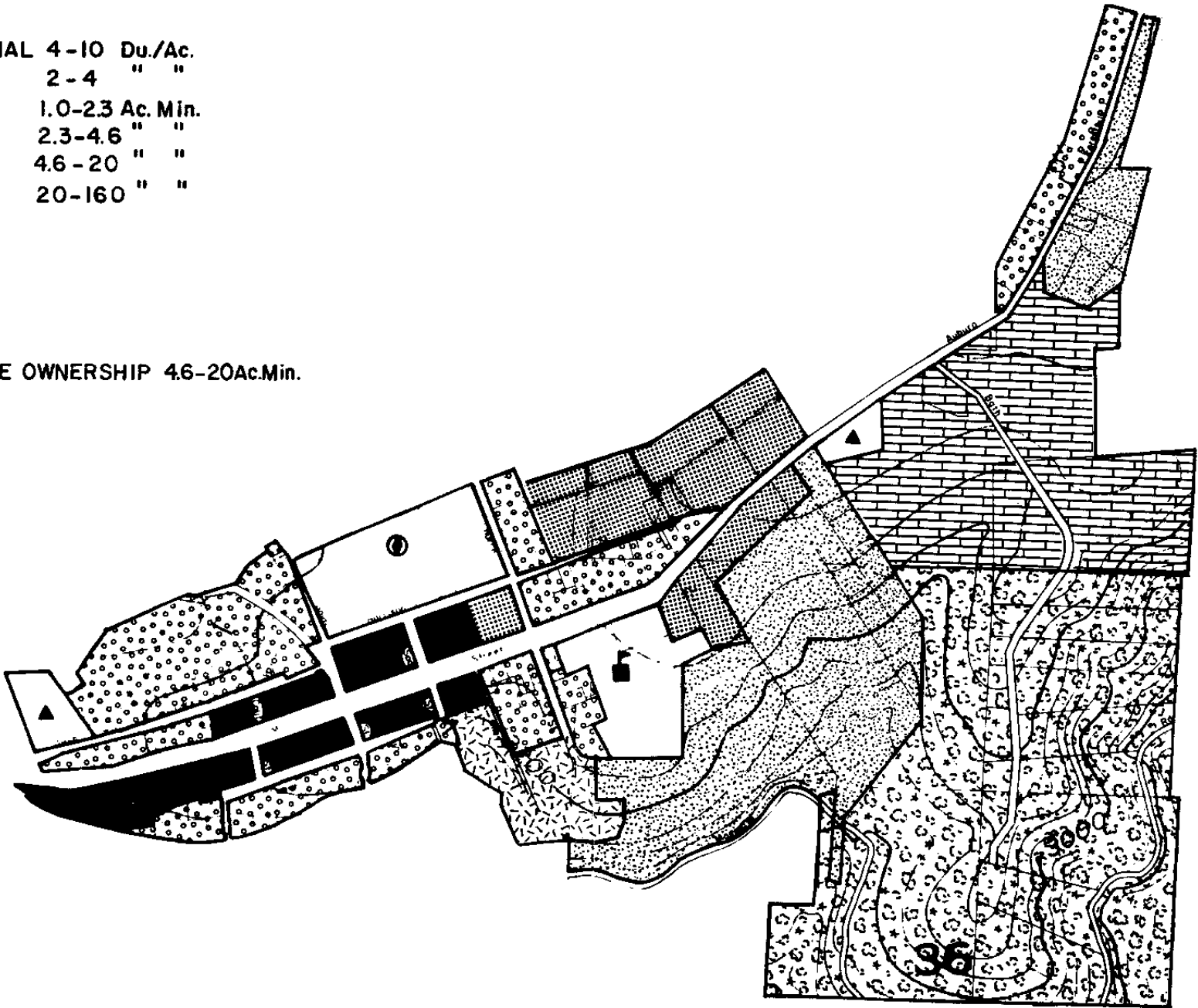
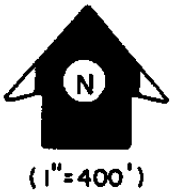
FORESTHILL GENERAL PLAN

(INSERT "A")

LEGEND

	MEDIUM DENSITY RESIDENTIAL	4 - 10 Du./Ac.
	LOW	" " 2 - 4 " "
	RURAL RESIDENTIAL	1.0 - 2.3 Ac. Min.
	RURAL ESTATE	2.3 - 4.6 " "
	FOREST RESIDENTIAL	4.6 - 20 " "
	FORESTRY	20 - 160 " "
	COMMERCIAL	
	INDUSTRIAL	
	PUBLIC	
	WATER INFLUENCE	
	PLANNING RESERVE	
	WATER INFLUENCE/PRIVATE OWNERSHIP	4.6 - 20 Ac. Min.
	EXISTING SCHOOL	
	EXISTING FIRE STATION	
	PROPOSED FIRE STATION	
	EXISTING PARK	
	PROPOSED PARK	

ADOPTED 4-20-1981



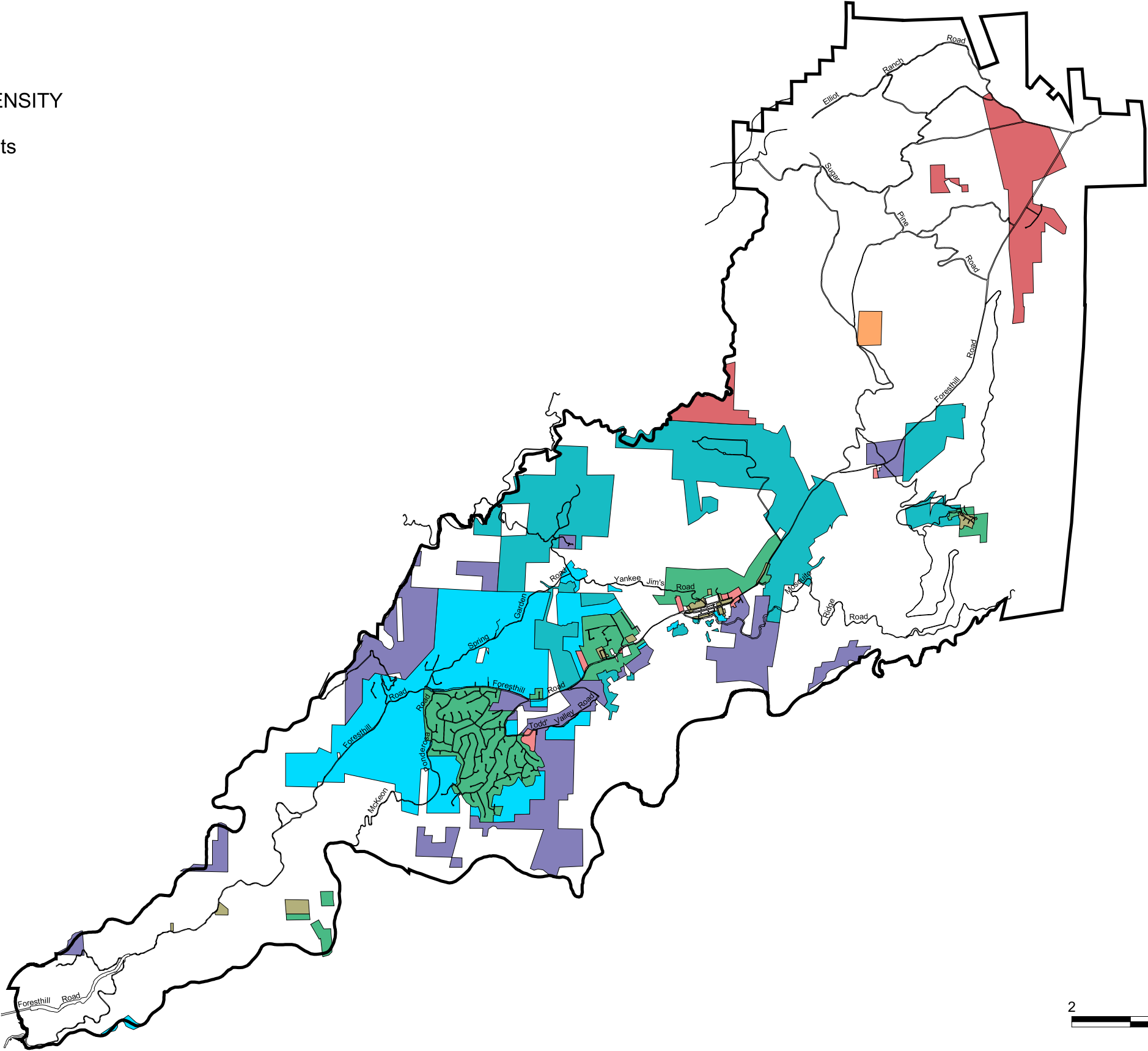
Source: Foresthill General Plan and EIR, April 1981 / Quad Knopf, Inc., 2002

GENERAL PLAN - HIGHEST DENSITY

Population: 28,355 Residents

LEGEND

General Plan Designation	
	8 DU / 1 AC
	6 DU / 1 AC
	4 DU / 1 AC
	1 DU / 1 AC
	1 DU / 2.3 AC
	1 DU / 4.6 AC
	1 DU / 10 AC
	1 DU / 20 AC
	1 DU / 80 AC
	1 DU / 160 AC
	NON-RESIDENTIAL



Notes: Developed by the Community Plan Team, based upon the Land Use Assumptions. A full size map is available for inspection at the Placer County Planning Department

Source: Placer County Planning Department, 2002 / Quad Knopf, Inc., 2002

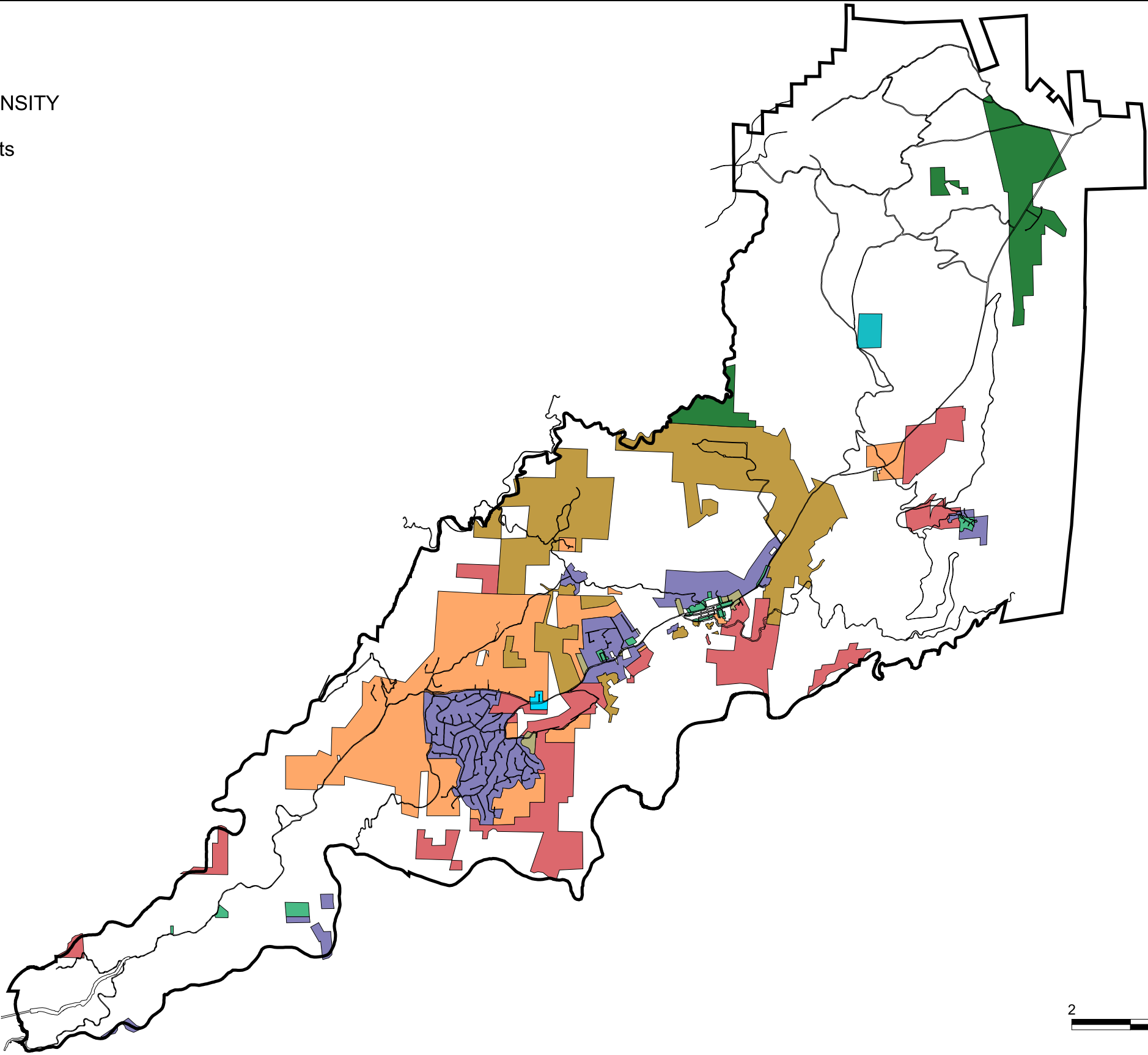


GENERAL PLAN - LOWEST DENSITY

Population: 12,727 Residents

LEGEND

General Plan Designation	
	8 DU / 1 AC
	6 DU / 1 AC
	4 DU / 1 AC
	1 DU / 1 AC
	1 DU / 2.3 AC
	1 DU / 4.6 AC
	1 DU / 10 AC
	1 DU / 20 AC
	1 DU / 80 AC
	1 DU / 160 AC
	NON-RESIDENTIAL



Notes: Developed by the Community Plan Team, based upon the Land Use Assumptions. A full size map is available for inspection at the Placer County Planning Department

Source: Placer County Planning Department, 2002 / Quad Knopf, Inc., 2002